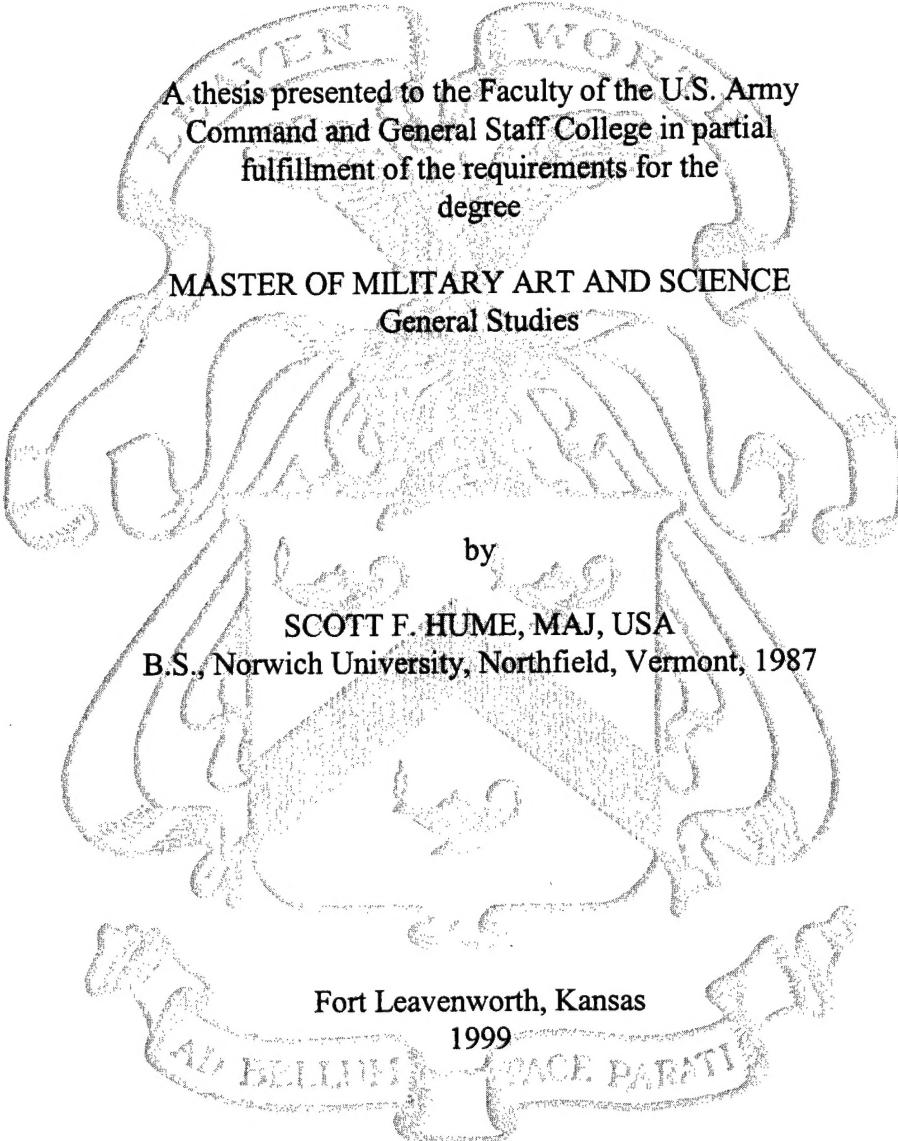


ARMORED RANGERS: DOES THE U.S. ARMY RANGER REGIMENT
NEED ARMORED VEHICLES TO ENHANCE ITS
FORCED ENTRY CAPABILITY?



A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

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1999

DTIC QUALITY INSPECTED 4

19990909 357

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188
<p>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</p>			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 4 Jun 99	3. REPORT TYPE AND DATES COVERED Master's Thesis 7 Aug 98 – 4 Jun 99	
4. TITLE AND SUBTITLE Armored Rangers: Does the US Army Ranger Regiment Need Armored Vehicles to Enhance its Forced Entry Capability?		5. FUNDING NUMBERS	
6. AUTHOR(S) MAJ Scott F. Hume			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD 1 Reynolds Ave., Bldg. 111, Rm. 123 Ft Leavenworth, KS 66027-1352		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for Public release; distribution is unlimited		12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 words) This thesis examines the ability of the US Army's Ranger Regiment to generate combat power during forced entry operations. This study examines the National Security Strategy requirements for force projection and forced entry as well as those same mandates in the National Military Strategy. After illustrating the national and military requirements mandating the existence of a ready and capable forced entry unit, four case studies of recent Ranger operations will be analyzed. The four historical cases selected are Operation Eagle Claw, Operation Urgent Fury, Operation Just Cause and UNOSOM II. These operations were chosen because of their relevance and similarity when compared to the most likely employment scenarios envisioned by the current Ranger Regimental Commander. This study will analyze each operation using the elements of combat power (maneuver, firepower, protection and leadership) as a framework and will determine if the forced entry unit in each vignette was capable of generating sufficient combat power for success. Further analysis is done to determine if the amount of combat power generated by the Ranger forced entry capability is sufficient to expect future success.			
14. SUBJECT TERMS		15. NUMBER OF PAGES 86	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UL

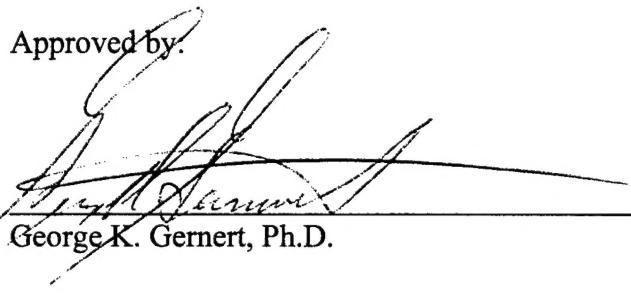
MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Scott F. Hume

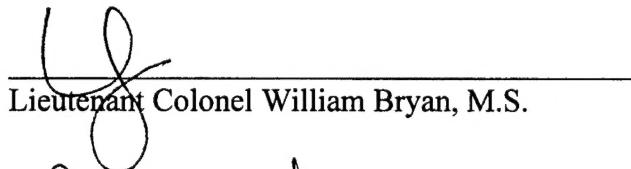
Thesis Title: Armored Rangers. Does the US Army Ranger Regiment Need Armored Vehicles to Enhance its Forced Entry Capability?

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

ARMORED RANGERS. DOES THE US ARMY RANGER REGIMENT NEED ARMORED VEHICLES TO ENHANCE ITS FORCED ENTRY CAPABILITY? by MAJ Scott F. Hume, USA, 86 pages

This thesis examines the ability of the US Army's Ranger Regiment to generate combat power during forced entry operations. This study examines the National Security Strategy requirements for force projection and forced entry as well as those same mandates in the National Military Strategy. After illustrating the national and military requirements mandating the existence of a ready and capable forced entry unit, four case studies of recent Ranger operations will be analyzed. The four historical cases selected are Operation Eagle Claw, Operation Urgent Fury, Operation Just Cause and UNOSOM II. These operations were chosen because of their relevance and similarity when compared to the most likely employment scenarios envisioned by the current Ranger Regimental Commander. This study will analyze each operation using the elements of combat power (maneuver, firepower, protection and leadership) as a framework and will determine if the forced entry unit in each vignette was capable of generating sufficient combat power for success. Further analysis is done to determine if the amount of combat power generated by the Ranger forced entry capability is sufficient to expect future success.

This study concludes that the current Ranger forced entry capability does not generate enough combat power to reasonably guarantee success in all likely future scenarios. The conclusion is that the addition of an armored vehicle package is a solution that would allow the Ranger Regiment to deploy sufficient combat power during forced entry and associated missions.

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CHAPTER I

INTRODUCTION

The United States no longer maintains a forward-based defensive philosophy for its armed forces. Today the National Security Strategy supported by the National Military Strategy mandates that the armed forces support a force projection strategy.¹ At the operational and tactical levels all forces must be prepared to deploy worldwide to fight, win and survive through the entire spectrum of conflict. Clearly this strategy demands that U.S. armed forces, especially its contingency forces, maintain a rapidly deployable, highly efficient, and survivable force for the worst-case scenario that a force-projection nation may face. In this scenario, U.S. forces forcibly enter a country far from their lines of communications. They either conduct a raid (i.e., conduct combat operations followed by a planned, rapid withdrawal) or an assault to set the stage for the arrival of follow-on forces. These are absolutely the most difficult missions a rapid deployment, forced entry force can face. Therefore, senior planners and commanders must ensure that they take every conceivable measure to ensure unequivocal success by US forced entry forces, and specifically the U.S. Army Ranger Regiment.

Army leaders understand the need to be a force-projection service. The Army's doctrine now supports force projection. It has forces trained specifically for force projection and forced entry. The shortcoming of the strategy and of early-entry forces is the equipment available to this force. U.S. Army forces, in conjunction with other sister service assets, can rapidly deploy anywhere in the world to conduct forced entry

operations. But after the initial shock wears off they have really only accomplished a very daring insertion of an extremely vulnerable force.

At the forefront of the nation's forced entry capability is the U.S. Army's Ranger Regiment. The Ranger Regiment is light infantry based. It is a well-trained and well-funded, airborne capable special operations force. All commissioned and noncommissioned officers are hand-selected. All members are trained to be the best, most capable, intelligent, and physically fit paratroopers in the world. Ranger units are expected to deploy worldwide within eighteen hours of notification and conduct opposed forced entry operations at night. Upon arrival in the area of operations, Rangers are expected to fight in units ranging from squad to regiment. Extreme speed and violence of action is their hallmark.

While the Ranger Regiment is clearly the best-led, best-trained infantry and special operations unit in the nation, possibly the world, its overwhelming advantage in night-vision equipment and ability to fight at night is negated at daybreak.

The Ranger Regiment needs an armored force to deploy as part of the forced entry package. Rangers do not currently have the firepower and maneuver capability to survive on a drop zone in a foreign land during daylight, if the opposing country has the capability to muster any type of vehicle equipped with weapons of machine-gun lethality or greater.

According to the current Regimental Commander, Colonel Stanley A. McChrystal, the most important reasons for equipping the Ranger Regiment with an armored capability are to ensure unequivocal success either during highly difficult, extremely politically sensitive special operations or when the ability to introduce follow-on forces is impossible.

Colonel McChrystal clearly depicts his vision of the two most likely combat scenarios for the Ranger Regiment.

A Ranger force flies from CONUS directly to a hostile target at night. It conducts a night airborne mission to destroy enemy forces, most probably to seize an airfield for the introduction of follow-on forces or to facilitate the evacuation of American citizens and designated allies. The enemy situation will be non-permissive, thus, requiring a forced entry. The situation briefed during the planning process will change dramatically and unpredictably enroute to the target. In addition to fighting on the drop zone (generally an airport located in a population center), much of the fighting will be conducted in the surrounding urban areas. These urban areas will have no distinct friendly or enemy boundaries. Noncombatants and possibly media will be scattered throughout the combat zone.

Once the Ranger secure the airfield, they will expand their security perimeter to ensure enemy weapons systems cannot influence inbound and/or outbound aircraft on the airfield. Finally, Rangers will penetrate the surrounding urban area to retrieve personnel as directed.²

The second likely scenario resembles the previous one but the necessity for the airfield seizure changes. In this scenario, a Ranger force deploys from continental United States for a forced entry into an unfriendly nation to secure an airfield at night. The purpose in this scenario would be to facilitate the destruction of a subsequent target or retrieval of equipment or personnel used in conducting a previous operation. The Ranger mission is the retrieval of this force and the accompanying cargo. Implied in this

scenario is that the Ranger raid is conducted within the boundaries of a nation that has already been alerted by previous and ongoing missions of friendly forces.³

In this case surprise and darkness will facilitate a Ranger raid, but the lack of firepower and maneuver capability will significantly erode the chance of mission success. In other words, there is little likelihood of successfully uploading the aircraft with rangers, cargo, and other friendly forces and the subsequent exfiltration of the aircraft if the enemy is equipped with like or greater capability weapons systems or vehicles.

Table 1. Worldwide Armor

Country	Tanks	AIFVs	APCs	SAM/AD Gun
Iran	1,390	400	550	1,700
Iraq	2,700	900	500	6,000
North Korea	3,000	500	2,500	17,800
China	8,500	5,500	Unknown	Unknown
Libya	560	1,000	750	720
Yugoslavia	785	568	169	1,910
Bosnia–Herzegovina	80	Unknown	70	Unknown
Bulgaria	1,475	100	1,894	467
Afghanistan	700	550	1,100	600

Table 1 illustrates the armored vehicle and tank strength of a number of countries hostile towards the interests of the United States or a current focus of the U.S. military.⁴

Examples of general contingency missions to prove my hypothesis. The target countries in the examples have armored forces capable of responding to a forced entry and defeating it. That is, unless the forced entry force is equipped to overcome the enemy armored force.

Assumptions

1. This thesis will focus on airfield seizure. The purpose of seizing an airfield is twofold. One purpose is to secure an aerial port of debarkation either for follow-on forces to arrive into and deploy from. The second purpose is to exfiltrate the Ranger force or other forces and equipment as directed.
2. Any Ranger force conducting forced entry operations will do so at night.
3. If a mission is important enough to require an opposed forced entry, follow-on forces will be needed either because quick conclusion to hostilities is not imminent or that the Ranger force will be extracted before daylight.
4. The Ranger force will use darkness as a combat multiplier. A significant aspect of their tactical advantage will be negated with the onset of sunrise.
5. The thesis will not assume that the Ranger Regiment will conduct forced entry only into third world countries.
6. Most nations that the United States considers even remotely threatening are equipped with armored vehicles.
7. The special operations community will be supported by the C-17 cargo aircraft.

8. Rangers can conduct airborne operations from a C-17 aircraft that is loaded with an armored vehicle.
9. The armored vehicle does not need to be air dropable.
10. The Ranger force can seize and clear an airfield quickly and efficiently enough to facilitate nearly immediate landing and download of aircraft.

Scope

It is well publicized that the modus operandi of U.S. Army Rangers is to conduct airborne assaults and/or airfield seizures at night with precision and rapidity. The shock effect leaves the unsuspecting enemy forces on and around the drop zone virtually defenseless. This is where the advantage for the Ranger force ends. If the ranger assault force does not displace, exfiltrate, or receive follow-on forces it could conceivably lose all advantage by sunrise and then may experience a severe tactical disadvantage.

In virtually every scenario, enemy forces regain the advantage as time passes. The enemy can continue to increase the forces responding to the invasion, are familiar with the terrain, and have a distinct logistics advantage due to their ability to quickly resupply generally without opposition. The Ranger force can offset enemy advantages by defeating enemy opposition quickly through offensive action and in theory destroy anything that can influence exfiltration aircraft which at some point becomes the tactical center of gravity for friendly forces.

An armored package accompanying the Rangers will provide a maneuver capability and an extreme firepower enhancement. With the appropriate sensor packages these vehicles could bring a standoff and early-warning capability that does not exist in a

man-portable form. These vehicles could also offer the force a small-scale preemptive strike capability. In terms of follow-on missions as envisioned in the regimental commander's vision statement, an armored package, especially if impenetrable by hand-held antitank weapons, could conceivably maneuver through an urban area with impunity if unopposed by enemy tanks. A perfect example of this is the Ranger experiences in Somalia in October 1993. A small armored force would have been unstoppable if employed anywhere in the streets of Mogadishu.

The goal of this study is to prove that the Ranger Regiment needs an armored vehicle package available to deploy with it during forced entry or other selected special operations. It will be shown in this thesis which types of ranger operations will most benefit from the addition of attached armored vehicles.

The specific scope of this study will cover forced entry operations in conventional and special operations scenarios. The study will be further focused to show the utility of armored assets in the urban terrain that usually accompanies most of the world's airports and airfields. This study will not cover the utility of armored vehicles in open terrain or any other conventional use.

Key Terms

Airfield Seizure: Type of attack or raid. Executed for the purpose of using the airfield for the introduction of follow-on forces or for the extraction of raiding forces.

Armor: The firepower, protection from enemy fire, and speed create the shock effect necessary to disrupt or defeat the opposition. Tanks can destroy armored vehicles, infantry units and antitank-guided missile units. Tanks can break through suppressed

defenses, exploit the success of an attack by striking deep into the enemy's rear areas, and pursue defeated enemy forces. Armored units can also blunt enemy attacks and launch counterattacks as part of a defense.⁵

Combat Power: Is created by combining the elements of maneuver, firepower, protection, and leadership. Overwhelming combat power is the ability to focus sufficient force to ensure success and deny the enemy any chance of escape or effective retaliation.⁶

Deployability: A product of strategic lift coupled with Army force readiness. To ease the burden of strategic lift, the Army pre-positions equipment on land and afloat, improves military-related infrastructures in less stable regions, designs forces and equipment that are easily transportable, and trains forces to deploy quickly.⁷

Force Projection: The movement of military forces from the continental United States or a theatre in response to requirements of war or operations other than war. Force-projection operations extend from mobilization and deployment of forces, to redeployment to CONUS or home theater, and to subsequent demobilization.⁸

Light Armor: Can participate in a variety of Army operations, including rapid worldwide deployment throughout a wide range of environments. Tactical missions include providing security, reconnaissance, and antiarmor firepower to the light or airborne division. Light armored units also conduct standard armor operations, including the destruction of enemy forces in coordination with other arms.⁹

Raid: The Army conducts attacks and raids to create situations that permit seizing and maintaining political and military initiative. Normally, the U.S. executes attacks and raids to achieve specific objectives other than by gaining or holding terrain. Attacks by

conventional, air or special operations forces, acting independently or in concert, are used to damage or destroy high-value targets or to demonstrate U.S. capability and resolve to achieve a favorable result. Raids are usually small-scale operations involving swift penetration of hostile territory to secure information, temporarily secure an objective, or destroy a target. Raids are followed by a rapid, preplanned withdrawal.¹⁰

¹A National Security Strategy for a New Century, Washington DC: The White House, October 1998, 23-28.

²Colonel Stanley A. McChrystal, "Regimental Commanders Vision Statement," 1997.

³Ibid.

⁴The International Institute for Strategic Studies, *The Military Balance*, (London, Oxford University Press, 1998), 10-200.

⁵Field Manual 100-5, *Operations*, Washington DC: HQ Department of the Army, June 1993, 2-23.

⁶Ibid., 2-10.

⁷Ibid., 1-5.

⁸Ibid., 3-1.

⁹Ibid., 2-23.

¹⁰Ibid., 13-8.

CHAPTER II

LITERATURE REVIEW

Literature to support this thesis has become extremely abundant in some respects over the last ten years but simultaneously very sparse in others. This chapter will show that the US national strategy requires and supports a robust contingency force capable of forced entry. US Army and Joint doctrine clearly specifies the required capabilities a forced entry unit is required to possess in order to be successful on the battlefield as well as be operationally and strategically successful. Finally, there is ample literature that provides historical examples of Ranger forced entry or other special operations where armor was needed for mission success or where the absence of friendly armor allowed success to be held tenuously until another combat multiplier could be brought to bear.

This review will also show that there is substantial doctrinal and historical material that points to the need for armored assets to accompany contingency and other rapid deployment forces, but nothing has been written in an attempt to prove this thesis. On the contrary, there is material to suggest that Rangers require no additional firepower, mobility, or protection because of superior leadership.

The literature reviewed falls generally into four categories: doctrinal manuals; historical publications; unpublished monographs and theses; and published articles.

National Security Strategy, October 1998. The US National Security Strategy specifies and quantifies the interests of the nation. While in many respects it is very general, it clearly identifies the national interests which are most often and easily secured through the use of the military instrument of power. Those areas include protection of

allies or others for the purpose of spreading or strengthening democracy or furthering the economic interests of the United States. Secondly, it states that the country must counter the specific dangers of weapons of mass destruction proliferation, drug trafficking, and large-scale international crime.

National Military Strategy, 1997. The US military strategy defines its roles in concert with the tenets of shape (the international environment), respond (to the full spectrum of crises), and prepare now (for an uncertain future). In the description of each tenet there is clearly a call for a credible forced entry capability, but especially in the “prepare now” tenet.¹ In the category of prepare now three of the four listed strategic concepts call for a Ranger Regiment more robust than the one currently fielded. The NMS requires a force that maintains the ability to be rapidly projected, maintains the means to project the force, and ensures the force is decisive at delivery. The purpose of this document is to show the need of a more robust forced entry force.

United States Army Posture Statement Fiscal Year 1999. The Army posture statement did not specifically address this study. Yet, it did provide one key insight. One Army equipment improvement program focus for the Army After Next is to “Maintain Combat Overmatch.” This program highlights product improvements for the Bradley fighting vehicle and Abrams main battle tank. The inference is that proliferation of armored vehicles with significant capability is enough to warrant the Army to dedicate significant energy toward countering this threat.

FM 100-5, *Operations*, June 1993. The latest available version of this manual is dated June 1993. This document will provide many of the essential elements that build the

foundation of this thesis. This manual will be referenced when comparing current Ranger Regiment capabilities to the principles of war, the tenets of Army operations, and the elements of combat power. This manual also reemphasizes the key ideas of the NSS and NMS and the need for a credible, survivable rapidly deployable force. Finally, this portion of the Army's doctrine provides guidance on force lethality requirements for opposed entry forces which the Ranger Regiment and the joint assets it normally associates itself with cannot provide.

FM 90-26, *Airborne Operations*, December 1990. This is the doctrinal manual for the conduct of airborne operations. In the description of mission profiles at the strategic and operational level, the airfield seizure is given as an example in each case. While this manual specifically mentions the Ranger Regiment in its list of airborne forces, this manual is clearly written for the 82nd Airborne Division. With regard to the 82nd Airborne Division, the chapter of this manual on capabilities expresses that there are credible antiarmor assets that can accompany an assault force during opposed entry operations. These assets range from hand-held antitank weapons to vehicle-mounted TOWs and helicopter-launched missile. The manual also mentions the antitank capability of supporting air assets from sister or coalition forces. This information will be used in a doctrinal framework to prove that although these ground assets are far more significant than the Ranger Regiment's, they are incapable of providing the protection and firepower required for such operations. They are sometimes more of a hindrance to maneuver and mobility than having no assets at all. This thesis will show that air assets have a large logistics requirement that does not allow them to provide constant credible coverage

during all phases of entry operations and follow-on operations. This will support the proposition that nothing less than an armored vehicle will create the appropriate amount of combat power during forced entry operations.

FM 17-18, *Light Armor Operations*, March 1994. This is a doctrinal manual published in anticipation of the fielding of the M8 armored gun system into the Army inventory to replace the M551 Sheridan airborne combat assault vehicle. The concept of the weapons system was that it would be air dropable and capable of accompanying airborne soldiers during opposed airborne assault operations. This manual shows how the weapons system supports the ground force commander in respect to many of the principles of war (enhances offensive, mass, maneuver, economy of force, security of force, and surprise), the tenets of Army operations (initiative, agility, versatility and depth), and the elements of combat power (maneuver, firepower, and protection).

FM 100-25, *Army Special Operations Forces*, December 1991. This doctrinal manual adds clear support to the thesis. First, the manual serves to introduce the rapidly changing world and highlights, clarifies, and reinforces keys points found in the national security strategy and the national military strategy. It orients special operations forces toward the increasing number of educated adversaries in the most remote reaches of the world and toward the continually increasing lethality of weapons available to the poorest countries.

The FM 100-25 also describes typical employment scenarios of the Ranger Regiment to include airfield seizures, direct action raids and ambushes, and the retrieval of personnel and equipment through the linkup with other SOF units in the area of

operations. Of the four limitations listed for the Ranger Regiment, three of them are related to either firepower or mobility.

FM 7-85, *Ranger Operations*, June 1987. This manual is complimentary to all others that describe the missions and operations of airborne, ranger, and special operations forces. This manual confirms the airfield seizure and/or forced entry as a Ranger mission, reiterates the strategic deployment capability of the Ranger force, and emphasizes the unit's antiarmor capability as a limitation.

TRADOC PAM 525-200-2, *Early Entry Lethality and Survivability*, March 1994. This TRADOC pamphlet is a response to the changes in the national security strategy through 1993. This pamphlet outlines a concept for the strategically deployable army of the twenty-first century. The purpose of the pamphlet is to outline the capabilities the Army requires to conduct joint, interagency, and combined or coalition early entry operations in support of missions requiring the projection of U.S. forces across the range of military operations.² This pamphlet is the first document researched to acknowledge the inadequacies of US early entry forces from the standpoint of lethality and survivability and does so in relation to US national view of possible world threats. These threats include those already mentioned in the introduction, specifically, forcing entry into a distant unfriendly nation with an unfriendly populace, and armed forces with modern and numerous weapons greater in firepower and abundance than that which the Army can currently deploy. Furthermore, this concept recognizes that forced entry forces may also be required to be the decisive and only force deployed. Such forces must have a capability to project themselves from the point of entry and must be survivable through the

expansion of battle space in all directions and against a modern well-trained armored force.

FM 90-XX, "Forcible Entry," October 1993. This manual is a draft publication of multiservice procedures for forcible entry operations. It is the first manual to quantify some of the specific tactical threats enemy forces can produce during a forced entry operation to seize an airfield. This manual supports the need for an armored capability with the forced entry force is the protection of friendly aircraft on a recently seized airfield. Since aircraft are very vulnerable to even the smallest direct-fire weapons systems, it is imperative that forced entry forces have the ability to expand an airhead quickly enough to generate combat power through the influx of additional aircraft. Additionally, ground forces must prevent an enemy from interdicting aircraft on the ground to prevent blocking the landing strip and obstructing the flow of follow-on forces or extraction of the assault force. The ability to protect aircraft on the runway quickly means pushing the airhead line out farther than the maximum effective range of enemy small arms at a minimum. This requires mobility and firepower not currently in the Ranger force package.

75th Ranger Regiment Commanders Vision Statement Fiscal Year 1998. This document is published by the Ranger Regimental Commander. The portion of that document applicable to this thesis is the Regimental Commanders vision for future "real world" deployment of the regiment or its subordinate units. The current commander states that units of the regiment will be deployed to one of two scenarios. The first is a rapid deployment to a distant, isolated nation to seize an airfield to facilitate the retrieval

of designated personnel or equipment. The operation will be of such vast national importance that failure could be catastrophic to the highest levels. Reinforcing units will not be an option should the plan begin to fail.

The second likely scenario is an airborne assault to seize an airfield in a hostile nation for the purpose of expanding an airhead and receiving follow-on forces. After successful seizure of the airhead, Rangers will receive follow-on missions to enter adjacent urban areas to execute noncombatant evacuation operations among an unfriendly population. It will be shown that implied in these scenarios is the need for armored forces to successfully complete these two mission profiles.

The Case for Army XXI "Medium Weight" Aero-Motorized Divisions May 1998.

This is a study conducted by the Strategic Studies Institute highlighting the need for a change in the army force structure to facilitate the National Military Security's requirement for a lethal quickly projectable force. This document does not discuss forced entry or special operations but does present a case that there is no force in the Army force structure that is lethal and deployable. The authors contend that the army has essentially two types of maneuver forces: Those that are deployable and those that are lethal. There is no force that is both. The authors maintain that strategically deployable force projection forces need light armored vehicles that are highly deployable but maximize firepower, survivability and mobility.

“Airfield Seizure” by Major G. C. Bonham, December 1990. This monograph was the only material found that focused solely on the Ranger Regiments forced entry and/or airfield seizure capability using the elements of combat power as a framework. This

monograph uses the historical examples of Operations Mercury, Urgent Fury, and Just Cause to illustrate the utility and need for a forced entry airfield seizure capability. While the work never suggests the need for armored vehicles, it does show that in the first two examples the assault forces were significantly hampered from achieving their goals by a lack of firepower and ability to maneuver. The example of Operation Just Cause illustrates lessons learned from Urgent Fury and highlights the fact that the Ranger Regiment deployed special operations vehicles during this operation. These vehicles enhanced the Ranger's maneuver capability and allowed the integration of weapons systems with greater firepower, thus, enhancing unit protection. The final significance of this study, while not the author's intent, shows the extreme vulnerability of forced entry units. Although these forces are generally superior in the leadership arena and have surprise on their side, the other three elements of combat power often fall in favor of the invaded nation's forces. The analysis of Operation Just Cause falls beyond the scope of this review.

Unpublished Monographs and Theses. Seven other documents, theses, and monographs that support this thesis were reviewed. Specific bibliographic data is supplied at the end of this chapter. The common thread in these documents is twofold: (1) Each attempts to prove through the recognition of a force projection national strategy that the Army's ground maneuver forces are either too heavy to rapidly deploy, or (2) If deployable, they are woefully inadequate from the standpoint of their ability to generate combat power.

Most favor the fielding of the M8 armored gun system, but all recognize and attempt to prove that there is a shortfall in the combat power capabilities of rapid deployment contingency forces or a deployment capability shortfall. They all attempt to prove that the United States does not have a force that can deploy with a credible firepower capability against threats considered commonplace this decade.

Published Articles. The published articles reviewed to date are listed in the bibliography. Most deal more with technical improvements in the armored vehicle industry, highlight the strengths and weaknesses of wheeled and tracked vehicles, and discuss in detail weapons systems, crew protection, deployability, and associated facts. Most data from these articles assist in determining what type of vehicle is most suitable if this study proved the need for a vehicle package in the first place. The literature serves to educate one on the constraints, limitations, and restrictions of the problem at hand.

Historical Sources. Historical case studies of recent U.S. military operations prove a valuable source of data. These historical sources, though they are secondary sources, serve to corroborate and complement other sources. The historical sources used are primarily accounts of the four battles. Some authors derived their content from the mission planners and some from the soldiers who participated. The bulk of this research comes from these sources. The author found no significant discrepancies or conflicts between sources on the same battles or missions.

¹National Military Strategy, Chairman, The Joint Chiefs of Staff, 1997.

²TRADOC Pamphlet 525-200-2, 1.

CHAPTER III

METHODOLOGY

The ultimate purpose of the study is to prove the U.S. Army Ranger Regiment needs an armored vehicle. This thesis will examine current Ranger capabilities for conducting forcible entry operations to seize an airfield in a country whose government is hostile to the United States. The author will validate the thesis position in terms of the elements of combat power and the principles of war.

This study will not address strategic lift aircraft available and reconfiguration thereof. It will only take into account the assumption made in chapter I that the C-17 cargo aircraft will eventually become the principal airframe used to support the Ranger forced entry package. In order to keep this study unclassified and to facilitate the widest possible dissemination, details of current strategic lift unit task organization will not be discussed. A further assumption is that a C-17 cargo aircraft-equipped forced entry aircraft package will have no additional capability over current capabilities except what has been designed into the construction of the C-17.

In order to examine current Ranger capabilities, first be examined and understood the National Security Strategy and the national interests of the United States. An understanding of the United States national interests will lead to the identification, in general terms, of those entities that threaten those interests.

As stated in chapter I, those powers that threaten the interests of the United States cannot be assumed to be either first rate global powers or third world fledgling democracies crumbling to antidemocracy insurgencies. To the contrary, the US must

assume that the entities threatening the interests of the United States have capabilities that range throughout the spectrum of national power. And they can possibly be quite well armed, funded, isolated, defended, and protected and are now unnoticed or unpredictable and unstable.

After analyzing the interests of the United States, this thesis will review the national military strategy to show how the military is organized. It will emphasize CONUS based force projection capability. This review will illustrate where the U.S. Army Ranger Regiment fits into the force structure, thus allowing the analysis of its mission.

The analysis of the Ranger mission will clearly depict those tactical tasks and operations the Ranger Regiment is expected to accomplish. This study will focus on airfield seizure and those tactical tasks that usually are concurrent with or subsequent to seizing an airfield in a forced entry operation. A detailed description of airfield seizure operations will be used as a point of departure for the comparison of capabilities to requirements.

After identifying the need for a force projection strategy and the Ranger forced entry requirements and capabilities, the most recent historical examples of Ranger airfield seizure operations will be analyzed. These operations include the hostage rescue attempt in Iran in 1980, Operations Urgent Fury, Just Cause, and UNOSOM II in Somalia in 1994. These operations will be analyzed using the elements of combat power to determine if the Ranger force involved was adequately equipped to accomplish its assigned mission successfully without armored vehicles. This analysis will also attempt to determine

whether significant risk existed during mission execution due to the absence of armored vehicles.

All scenarios, whether historical or hypothetical, will be analyzed against the elements of combat power (maneuver, firepower, protection, and leadership). This framework will serve to determine if Ranger forces had enough combat power to be successful in historical examples. The U.S. Army Rangers have been quite successful in recent operations. This analysis will determine if success was due to overwhelming combat power or to other factors. If other factors facilitated success the author will determine if they were anomalies or if they can be expected in future operations, thus negating the need for additional combat power.

The numerous sources listed in chapter II provide the data for this study. Government publications and doctrinal manuals will be used to describe the nation's needs and what the nation's leadership expects the Ranger Regiment to do in order to ensure it can protect those needs when called. For analysis of historical examples a combination of sources will be used. Among the most useful are after-action reviews, works of history, military lessons learned publications, and professional journals. The data derived from these sources will be compared to doctrinal literature for analysis.

CHAPTER IV

ANALYSIS OF RECENT RANGER ACTIONS

We must judge National Security Strategy by its success in meeting the fundamental purposes set out in the Preamble of the Constitution . . . provide for the common defense, promote the general welfare, and secure the blessings of Liberty to ourselves and our posterity.¹

The US national security strategy has been designed around three core objectives that are essentially a modern-day translation of the preamble:

1. Enhance US security
2. Bolster America's economic prosperity
3. Promote democracy abroad

Although the objectives are easy to understand, in spirit they are much more difficult for the United States to put into practice. The difficulties lie in a number of arenas. First, the end of the Cold War changed the national and military focus abruptly and monumentally. Americans no longer have one great adversary where all their attention is focused. Therefore without one great adversary and national threat, it is quite reasonable that the US Army no longer needed a Cold War military. No longer did the Army need to be deployed where they thought the Cold War might be fought. While at a glance this seems logical, there are now a number of unexpected circumstances that make this ideology a paradox.

The US political and military leadership agreed in the early nineties that the US did not need a big military nor did it need to be forward deployed as extensively as it was.

Unfortunately the leadership did not know then that the Army's current situation of many small focuses and a small military is not as effective a combination as expected.

Secondly, the US national interests now are quite engrossed in regions of the world that it had scarcely considered a decade ago. Subsequently there is little or no infrastructure for protection of these interests. Many of these oft forgotten regions are now new sovereignties struggling to survive--often on the verge of breakdown and threatened by some level of anarchy or an ideology not favorable to the US interests or these of its allies.

To further complicate the fragile and tenuous situation, the antagonists in many of these situations are equipped with modern technology (arms, communications and information systems). They may use "unconventional or inexpensive approaches that circumvent our strengths, exploit our vulnerabilities, or confront us in ways we cannot match in kind. Of special concern are terrorism, the use of threatened use of WMD (weapons of mass destruction) and information warfare."²

Our NSS has many facets, requirements and mandates. The most important to this study is the NSS requirement to "prepare for an uncertain future" and maintain an "effective and efficient global power projection."³ The NSS focuses all forces and assets in the preparation for an uncertain future by describing the future battlefield.

"Although future threats are fluid and unpredictable, U.S. forces are likely to confront a variety of challenges across the spectrum of conflict, including efforts to deny our forces access to critical regions, urban warfare, information warfare and attacks from chemical and biological weapons."⁴

The final NSS imperative that pertains to this study is that of power projection. The NSS clearly mandates that the military forces of the United States maintain the appropriate force structure and deployment posture to enable successful conduct of military operations across the full spectrum of conflict. The military must be able to project itself rapidly to "shape, deter and respond even when we have no permanent presence or a limited infrastructure in the region."⁵

Using the NSS as guidance, the Chairman of the Joint Chiefs of Staff, in consultation with the Joint Chiefs of Staff and combatant commanders, develops the strategic direction over the next three thru five years. The 1997 NSS, the most current, is based on three concepts introduced in the 1997 NSS:

1. The US will remain globally engaged to shape the international environment.
2. Our armed forces must respond to the full spectrum of crisis.
3. We must take steps to prepare now for an uncertain future.

The national military objectives, while all oriented to defending and protecting U.S. national interests, are to promote peace and stability and when necessary defeat adversaries. This is done by developing a strategy using the concepts listed above: shape, respond, and prepare now. The subsequent military strategy designed to fulfill the national military objectives falls into four categories: strategic agility, power projection, decisive force, and overseas presence. Each of these concepts is particularly important this study. A description of the concepts follows:

Strategic agility: Timely concentration, employment, and sustainment of US military power anywhere, at its own initiative and at a speed and tempo its adversaries cannot match.

Power projection: The ability to rapidly and effectively deploy and sustain U.S. military power from multiple dispersed location until conflict resolution. Power projection includes the ability to respond swiftly with adaptable force packages and if necessary fight into denied areas.

Decisive force: Commitment of sufficient military power to overwhelm an adversary, establish even military conditions, and achieve a favorable political resolution.

Overseas presence: Visible posture of U.S. forces and infrastructure overseas to promote stability, prevent conflict and protect U.S. interests.

The most important aspect of the National Military Strategy's strategic concepts is its purpose.

“Together, these four strategic concepts emphasize that America’s military must be able to employ the right mix of forces and capabilities to provide the decisive advantage in any operation.”⁶

This is exactly why the Army Ranger Regiment needs an armored vehicle capability. The NMS further defines its vision in terms of its strategic concepts through a detailed description of required force capabilities. The required capability listed in the NMS that is of great significance to this study is Forcible Entry. As defined by the NMS, Forcible Entry Capability must enable the United States “to introduce military forces into foreign territory in a non-permissive environment.”⁷

The NMS specifically mandates that the military have a forced entry capability. This study will show that we only have limited capability--the US cannot perform what the NMS expects of its forced entry assets. Specifically, that "a forced entry capability ensures that the U.S. will always be able to gain access to seaports, airfields and other facilities that might otherwise be denied."

As the following historical case analyses illustrate, the U.S. has a great forced entry capability in the U.S. Army Ranger Regiment when it is employed with those forces and assets normally associated with forced entry. While the entry capability is great, the assurance of defending the entry point is lower than expected when analyzed against the elements of combat power (i.e., Ranger ability to generate combat power after entry is gained.)

The mission statement of the Ranger Regiment is cited below. The purpose of citing it is to show that the Ranger Regiment is expected to perform forced entry and other associated types of infantry specific missions often associated with requirements that quickly follow forced entry. Examples of follow on missions might include defense of the entry point in the form of a standard perimeter defense or pre-emptive direct action attacks.

The mission of the Ranger Regiment is to plan and conduct special operations and special light infantry operations across the operational continuum. The primary special operations mission is direct action. Ranger direct action operations may support or be supported by other special operations forces. They may also be conducted independently or in conjunction with conventional military operations. Rangers can also operate as special light infantry when conventional airborne or light infantry units are unsuited for or unable to perform a specific mission.⁸

In addition to being rapidly deployable, the Ranger Regiment must maintain this capability in two different arenas. While the Ranger Regiment is part of the U.S. Army Special Operations Command (USASOC) and must be capable of conducting special operations missions alone or with other SOF, it also is tied to its founding charter. The founding charter of the Regiment, set forth by General Creighton Abrams, then Chief of Staff of the Army, stated in 1973 is:

The Ranger Battalion is to be an Elite, Light, and most Proficient Infantry Battalion in the World: a Battalion that can do things with its hands and weapons better than anyone. The Battalion will not contain any Hoodlums or Brigands and if the Battalion is formed of such persons, it will be disbanded. Wherever the Battalion goes, it will be apparent that it is the Best!⁹

The charter further requires the Ranger Regiment to test and evaluate new equipment and tactics to determine suitability for instituting in the rest of the infantry force. Thus the founding charter, known as Abrams Charter, aligns the Ranger Regiment very closely to the Army's conventional infantry forces.

These two avenues, the mission statement and charter, in conjunction with standard army training management tools, converge to direct Ranger missions and requirements. From a conventional infantry viewpoint Ranger Regiment Battalions must be capable of conducting the same missions as the other types of infantry units in the Army (except mechanized infantry). Ranger units must be capable of conducting airborne assaults, assault or infiltration and/or exfiltration by helicopter and infiltration and/or exfiltration by foot march.

What Rangers are expected to do exactly is best told through the training guidance of the current Commander of the Ranger Regiment, Colonel Stanley A.

McChrystal. In his training guidance to the Regiment, Colonel McChrystal clearly articulates what he believes are the two most likely scenarios in which the Ranger Regiment could be committed.

The first scenario requires one Ranger battalion to alert without prior notification and deploy within the specified eighteen-hour timeline to a destination that is far from or completely unpenetrable to our lines of communication and conduct and assault through airborne assault or airland to seize and airfield. This airfield would be within or adjacent to a large urban population center. The situation briefed at takeoff will change while the force is enroute. The assault will occur at night, the force will be without sleep for over twenty-four hours and the point of entry for the force will be very confused. The conditions at the entry point will be anywhere in the continuum from permissive to nonpermissive. The area will also be populated by local civilians, armed opponents, armed forces generally considered friendly, media and any and every form of representation from many governmental, non-governmental, and international organizations. The entry may be opposed. The Ranger mission will be to secure the airfield either for expansion of the lodgment for follow-on forces or for future exfiltration aircraft and concurrent retrieval and/or rescue of American citizens designated allied personnel from the surrounding urban area.

This study will use four of the five most current combat scenarios the Ranger Regiment has been involved in to prove the need for an armored capability in the Ranger forced entry package. The four vignettes are: Operation Eagle Claw (Iran Hostage

Rescue, 1980), Operation Urgent Fury (Grenada, 1983), Operation Just Cause (Panama, 1989), and UNOSOM II (Somalia, 1993).

These operations were chosen for a number of reasons. They cover the spectrum of employment described in the current regimental commander's vision for near term conflicts. Operation Eagle Claw was a classified operation into an extremely unfriendly nation to rescue Americans. Operation Urgent Fury was a forced entry rescue also for the rescue of hostages. Operation Just Cause was a forced entry to secure a lodgment for follow-on forces. UNOSOM II was a mission that straddled the conventional and unconventional border of operations for the capture of a known criminal.

In each vignette the four elements of combat power (maneuver, firepower, protection and leadership) will be used as the framework for analysis. Further the analysis will show that in each of these four operations one of three things held true.

1. Military planners expected surprise (although a principle of war) to overcome deficiencies in firepower, maneuver, and protection. In three of the four operations surprise was definitely compromised while on the fourth it is questionable.

2. In each operation the enemy had the advantage in maneuver, which subsequently gave them the advantage in protection. Ranger forces were at best equal in firepower. Although their leadership was superior it alone did not win the day. Often not enough credit was given to enemy leadership subsequently Ranger units were not always optimally prepared to respond to a force better led than intelligence expected.

3. Finally in situations where the Ranger force have superior firepower from aircraft it was for a limited time, hard to control and cannot reasonably be expected to be continuously available in future missions.

Background

Operation Eagle Claw

Between January 1979 when the Shah left Iran for cancer therapy in the US and November 1979, the Iranian Government was run by the Prime Minister. Prime Minister Bachtiar was ruling the country for an absent leader. Ayatollah Khomeini returned from exile and was bringing the nation to revolt. The well-armed US and British equipped military was crumbling. The capital city saw violent mobs protesting against America outside the US Embassy nearly every day.

On 4 November 1979 an estimated 200-300 Iranian college students stormed the American Embassy in Tehran, Iran. After a three-hour struggle, all personnel in the embassy were taken hostage. This was the culmination of nearly two years of disintegrating control by the US-backed Shah of Iran. The dissention and eventual takeover was “engineered by Muslim fundamentalists against the Shah.”¹⁰ The revolt was in response to alleged ongoing brutality by the Shah’s secret police and because of the Shah’s “Westernization” of Iran and debasement of Iranian life.¹¹

Embassy Takeover

This hostage-taking episode took place after ten months of reassurance by the standing Iranian government that it would not happen. It caught the American intelligence and military establishments unaware and without a plan.

Five months later, after continuous planning and training, the U.S. military executed Operation Eagle Claw as a joint operation. I will describe the entire operation as it was planned. I will analyze the actions of the ground forces up to the aircraft accident and subsequent order to abort the mission. I will include the ground tactical plan of the assault force although it was not executed.

The following is a description of the original plan for operation Eagle Claw (The Iranian hostage rescue attempt also known as Desert I) from the account of Colonel James W. Kyle in his book *The Guts to Try*. Colonel Kyle was the Air Force component commander for the rescue mission.

Due to the duration of the mission and the limited hours of darkness in April this operation was planned for two nights.

Highlights of Eagle Claw

Night One

Three MC-130s depart Masirah, Oman, carrying Delta assault force, Ranger Security Force, linguists, and Air Force combat controllers. One additional aircraft carries an extra 1,500 gallons of fuel. The Rangers secure the refuel site before the arrival of other aircraft and depart after refueling.

1. Three EC-130s carrying 18,000 gallons of fuel depart to land at the airfield known as Desert I after secured for the purpose of refueling later arriving helicopters.
2. Eight RH-53 helicopters depart the U.S.S. Nimitz in the Gulf of Oman and fly to Desert I to refuel and upload the Delta Assault force for follow-on insertion to a hide site.

3. After refueling the helicopters depart for a linkup with a covert operation near the designated hide site approximately 50 miles southeast of Tehran.

4. After take-off of the helicopters from Desert I the fixed-wing aircraft depart, refuel in air, and return to Oman.

5. After drop off of the assault force vicinity of their hide site the helicopter force move to a covert lager and/or hide site approximately fifty miles north of the assault force hide site.

6. All forces are departed or in hide sites by dawn and the JTF Headquarters in Egypt monitors intelligence assets surveying the embassy. Concurrently the embassy will be monitored by agents on the ground in Tehran.

Night Two

If the assault force was not detected during the insertion a Ranger force departs from Egypt, crosses Saudi Arabia, refuels in flight and services an airfield through airland means south of Tehran in the town of Manzariyeh. This airfield will be used for the reception and exfiltration of the hostages.

1. Four AC-130 gunships accompany the airfield seizure / security force to provide fire support for the near simultaneously occurring embassy assault, fire support for the transload airfield, prevention of enemy fighter aircraft from taking off of nearby Mirahbad Airport in Tehran and one spare.

2. Ten minutes after the Transload Airfield is secured two C-141s arrive from Dhahran, Saudi Arabia, to await the arrival of hostages.

3. At about the same time as the airfield seizure the assault force commander is conducting a route reconnaissance with his CIA contact. Those personnel who will drive the assault force into Tehran are infiltrating by van to get the vehicles prepositioned by the CIA. After the route is surveyed and the infiltration vehicles return the drivers will move to the assault force hide site and load the assaulters behind false walls in the vans. Then they will conduct the insertion into the embassy. During the route recon, vehicle retrieval and assault force insertion the assault force will pass a series of two guarded road blocks three times.

4. The assault force plans to assault the Embassy and the Ministry of Foreign Affairs a short distance away at 11:00 P.M. The Charge D'Affairs and two others are being held at the Ministry. There is a forty-minute delay window based on the current situation. The extraction airfield and arrival of AC-130 will not occur until the embassy assault begins.

5. As soon as the assault begins, the six extraction helicopters will be called forward from their hide site east of Tehran. Four will land in the soccer stadium across the street from the Embassy and two near the Ministry of Foreign Affairs. All hostages were expected to be freed, consolidated and secured in the Embassy within 45 minutes. At that time they would be moved across the street to the soccer stadium.

6. After upload of rescued hostages and the assault force, the helicopters fly to the seized airfield in Manzriyeh south of Tehran for transfer to the C-141s and MC-130s.

7. After upload of all fixed wing aircraft, the helicopters would be destroyed and the planes would fly to Egypt.

Analysis of What Should Have Happened

What Actually Happened

Operation Eagle Claw began as planned from takeoff. The lead C-130 flew to the Desert I landing site and landed on time with the planned cargo and passengers. As the aircraft approached the landing zone it made a reconnaissance pass as planned for the pilots to survey the landing strip. From this point on the operation experienced unexpected changes until finally a helicopter crashed into a fuel laden C-130 forcing the mission commander to abort the mission.

The first change to the operation was that during the reconnaissance pass over the landing zone the lead C-130 saw a car on the road that paralleled the landing strip. The mission commander determined that operational security may have been destroyed.

On the next pass the C-130 landed and off loaded the Ranger and Delta Force airfield security and road block teams, the air force combat control teams and the air and ground command elements. The roadblock teams consisted of “mostly Rangers but some Delta.”¹² Almost immediately after the security and roadblock teams began moving to their positions a bus full of travelers drove down the dirt road along side the landing zone. It was immediately fired on, stopped and searched. All passengers were subdued and guarded.

While this was taking place, a fuel truck approached from the west. Two soldiers on motorcycles fired on it with small arms fire. When that failed to stop the fuel truck one soldier fired a M72 LAW (light antitank weapon) into it. It immediately exploded. While one of the two members of this road block team approached the truck yelling for

the driver to get out, a small pickup truck drove up from behind, picked up the fuel truck driver and sped away back to the east from where it had come. One motorcycle gave chase but could not catch it.

These actions took place in the span of ten minutes after the lead (and only one at time) C-130 touched down on Desert I. The assessment by Colonel Charlie Beckwith (Assault Force/Delta Force Commander) was that the bus incident would not violate OPSEC. They were prepared for that contingency. All bus passengers would be flown out on the C-130s and would be brought back on the second night and released on the extraction airfield. Colonel Beckwith also determined that the fuel truck was a smuggling operation due to the presence of the trailing security pick up. He did not think the fuel truck driver and his accomplice would subsequently report the incident to the authorities. Because the landing zone was so far from a populated area the flame of the fuel truck would not attract anyone's attention.

My analysis of this operation will begin here. Shortly after these incidents the remaining planes landed and subsequently the helicopters arrived. The fatal aircraft collision occurred then forcing the mission to be aborted.

Until the unfortunate aircraft collision at Desert I the mission, while not going exactly as planned, was still progressing successfully. There certainly was great use of some of the principles of war, surprise, security, offensive action, among others, but was there enough combat power to decisively overcome the opposition of the circumstances that evolved and the unforeseen circumstances or events that could have evolved?

Specifically was there enough firepower, protection, maneuver capability and leadership to execute all of the ground forces missions at Desert I for the operation to be successful?

With regard to the bus encounter there was enough combat power. The bus was unarmed, unexpectedly drove into the not yet expanded security perimeter and had the wheels shot out. The end result was successful because of the superior leadership and decision making capability of the security forces. The bus's ability to maneuver (get away) was destroyed, it had no firepower or protection and obviously no military leadership. Had the bus driver sensed his precarious situation and maneuvered to avoid personnel on the ground, turned around or driven faster it may have showed the lack of combat power of the security force. The security force, equipped with only two motorcycles and one jeep, although better armed may have been at the disadvantage with regard to maneuver for the following reasons:

1. The bus driver knew the road and was driving with the advantage of headlight.
2. The motorcycle drivers were unfamiliar with the road and were limited by having to drive with night vision goggles. They can not fire on the move and even if they caught the bus, they certainly could not get in front of it and force it to stop.
3. The jeep would have had the same night vision goggle disadvantage but probably would catch the bus. It can fire on the move but with an unstabilized machinegun it could possibly cause civilian casualties against President Carter's explicit instructions.

While the security force in any event would have had superior firepower and required no protection from a bus of civilians, the other two elements of combat power

cannot be ignored. If the fleeing bus scenario had come to pass an armored vehicle may have had greater maneuver capability because it can cross open terrain without need of a road. It is conceivable that it could outrun a bus on a dirt road and in either case could get in front of the bus and stop it by blocking in a nonlethal way. In the worst case it could use superior thermal sighting systems in conjunction with a stabilized weapons system to shoot the engine or tires and prevent escape and collateral damage. Additionally, the numerous advantages of a vehicle of this nature in conjunction with even a rudimentary communication system could keep all current leaders abreast of the situation and facilitate a greater influence of leadership throughout the battlespace.

While this scenario was conjecture based on a factual situation the following event at Desert I can be analyzed strictly based on the events that occurred.

As the two-man and/or two-motorcycle security team began moving west to their road block position they encounter a fuel truck moving east toward the landing zone. One of the motorcycle riders and the security leader drop their motorcycles. One man destroys the vehicle with a rocket as described earlier. Then the driver escapes in a following vehicle. In this case the security leader tried to give chase on a motorcycle but could not get the stalled bike started fast enough.

An armored vehicle of nearly any type could have eliminated the operational security threat of this escaping truck and passengers. A stabilized weapons system from a vehicle that can shoot on the move may have stopped the fuel truck without exploding it. It could certainly have given chase to the escaping pickup truck and may have been able

stop it through firepower by only closing the gap between the vehicles by as much as two kilometers.

Certainly the element of protection does not come into play in this case but the increased maneuver capability, stabilized accurate firepower system and the communications for immediate information transmission to all command levels could have prevented the escape of the truck.

Background

Operation Urgent Fury

The Island of Grenada lays approximately 1,500 miles southeast of the southern tip of Florida. It is the southern most island in the lesser Antilles chain.¹³ Formerly a British colony, it was granted independence in 1974.¹⁴ The first administration of this newly independent nation lasted roughly five years until it was overthrown by revolutionary forces led by Maurice Bishop in 1979.¹⁵ Under the newly established government, Maurice Bishop had moved the country of Grenada politically closer to Cuba and the Soviet Union. The Bishop administration allowed Cuba to construct a large runway at the south end of the island at Point Salines. This runway was large enough for aircraft to land on with the capability of interdicting US air and sealanes to Europe and the Middle East.¹⁶ In October of 1983 Maurice Bishop was arrested and subsequently executed by a left wing faction of the government's Central Committee.¹⁷ This strongly anti-US marxist group was led by the Deputy Prime Minister, Bernard Coard, with direct support of the leader of Grenadan armed forces, Hudson Austin.¹⁸ This situation was significant for more than the obvious reasons. In addition to having another communist

nation in our hemisphere, Grenada was now in a position to enhance or even expand communist aggression in two regions of the world. Grenada, as viewed by the US, was now a formidable transload point for Soviet and Libyan influence to South and Central America. It also enhanced Cuba's capability to support its 5,000-man force presently in Angola.¹⁹

600 US citizens were students at the Saint George School of Medicine. Their safety was put at risk by the curfews emplaced by the new marxist regime.²⁰

For the purpose of focus and brevity this study will only review the mission in which Rangers directly took part.

The Plan

The final DIA intelligence estimate of 22 October 1983 forecasted that the Grenadan Army consisted of approximately 1500 men with up to 300 reservists. Analysts also pointed out that the Grenadan army was equipped with six BTR-60 APC's and four Soviet made ZU-23s (double barreled twenty-three millimeter guns without tracking/radar capability). The ZU-23s were believed to be located around the Point Salines airfield. Additionally, there were up to 600 Cuban construction workers in a camp near the Point Salines airfield and as many as fifty Cuban military advisors. While there was a possibility that the Cuban construction workers were armed, their participation in resistance to U.S. intervention was not expected.²¹

Ground Tactical Plan

The Point Salines airfield has a 9,000-foot runway located on the southwest tip of the island.²² The runway runs east-west on a peninsula with the south side virtually

along the water. Within 250 meters of the east end of the runway was the True Blue Campus of the St. George's Medical School where the American students were thought to be located.

The plan to seize the airfield and rescue the students would take place in three phases. At 0300, 25 October 1983, a small pathfinder team was to parachute to a location northeast of the runway and collect detailed intelligence on runway conditions (i.e., obstacles to prevent aircraft landing) and enemy forces and activities around the runway.²³ Pathfinder intelligence was passed to the Ranger force in flight.

The force in flight was organized as follows: 1st Battalion, 75th Ranger Regiment (-) consisting of only A Company and B Company; and the 2nd Battalion, 75th Ranger Regiment (-) consisting of A, B and C Company's. While 1st Battalion had two companies and 2nd Battalion had three companies their manpower was the same. Each battalion only had 250 Rangers apiece. The mission of A Company, 1st Battalion was to jump at 0500 and clear the runway for the landing of the following aircraft. B Company, 1st Battalion was to land at 0530 and seize True Blue Campus and the east end of runway. The mission of 2nd Battalion, 75th Ranger Regiment was to land immediately after 1st Battalion and seize the western half of the Point Salines runway and on order move to and seize the Calvigny Barracks 12 kilometer to the northeast of Point Salines.²⁴

Originally mission planners expected that the runway would not be blocked, and there would be little to no enemy resistance. A parachute assault would not be required. The force would be able to air land (i.e., conduct mission from landed aircraft). Additionally, it was understood that securing the runway implied securing the small,

various clusters of buildings dotting the countryside within approximately one kilometer of the runway's north side. Once the runway, True Blue Campus and these various buildings were secured 1/75 Rangers would move to Calvigny Barracks. The securing and seizing of Calvigny Barracks was a D-Day objective. The airfield seizure portion of the operation was supported by three AC-130 Spectre gunships. The final detail of the original plan was that tactical surprise would be unlikely for the main body because of the employment one-half hour earlier of the runway clearing force. Also, the main body was scheduled to begin landing (or parachuting if necessary) at 0530--already daylight.

Change to Original Plan and Actual Execution

At 0330 25 October 1983, the pilot of the AC-130 inserting the pathfinder team reported that the runway was blocked by heavy vehicles. This meant that the airfield clearing force would probably not clear the runway in time for one aircraft to land. The 1/75 Ranger commander subsequently decided that his portion of the force must definitely jump.²⁵ This message did not get to all aircraft (at the time in flight). Subsequently troops in the last three aircraft took their parachutes off only to put them on again near H-Hour. This event, coupled with a lead aircraft aviation problem, assisted in the deterioration of the original plan.

The final outcome of the 1/75 Ranger assault on Point Salines was that the battalion TOC and B Company were the first to jump (at 0534) followed by the A Company runway clearing force (at 0552) and the remainder of 1/75 Rangers (from 0634-0705). It took more than one hour for seven aircraft to deliver 350 soldiers. The 1/75 Rangers was followed immediately by 2/75 Rangers at 0707 hours.

During the lengthy, piecemeal, daylight assault, aircraft received fire from one quad barrel 12.7-mm AA gun north of the runway and two dual barreled 23-mm AA guns approximately one kilometer northeast of the east end of the runway. This AA fire was not entirely effective but did force two aircraft to abort their approach and made the force commander give the order that jump altitude be pushed down to 500 feet. Within minutes of the onset of PRA, AA fires one of the two AC-130s overhead destroyed all AA capability in the vicinity of Point Salines.²⁶

Regardless of arrival sequence on Point Salines it was apparent to commanders that the high ground north of the runway must be secured before the runway could be considered secure. The 1/75 Rangers also realized that they must secure the True Blue Campus immediately to ensure no Americans were harmed or taken hostage.

From 0707 hours to 1000 hours each of the urban locations north of the runway (i.e. Cuban Barracks, fuel tanks, terminal, PRA log base, etc.) True Blue Campus and key terrain were systematically secured, thus securing Point Salines airfield. Upon confirming the airfield was secure, special operations aircraft began landing to offload supplies, motorcycles, gun jeeps, and various helicopters.

Three other significant actions happened at Point Salines airfield on this first day of Operation Urgent Fury. First, shortly after the landing of Special Operations C-130s and downloading of gun jeeps, one jeep was sent to secure a road junction. The road junction to be secured was 200 meters north of the True Blue Campus just forward of the A Co. 1/75 Rangers position. Enroute to this position the gun jeep commander became disoriented and drove two kilometers forward of his designated position. When he

noticed his mistake, the jeep commander turned his small force around and was engaged by a PRA ambush 600 meters north of where he was originally designated to go. Four Rangers were killed, one was wounded, and the vehicle was destroyed.²⁷

The second significant action was the landing of the first C-141 at 1405 hours. It delivered the division commander and one company of infantry from the 82nd Airborne Division. What makes this important is the third significant event, the PRA counter attack into A Company 1/75 Rangers sector by three BTR-60 APCs at 1530 hours. In addition to the obvious danger that three APCs pose to a light infantry force is the enormous danger they pose to unarmed aircraft parked on a single strip runway. As soon as these APCs appeared, all available weapons systems began firing at them (rifles, LAWs and Recoilless Rifles).²⁸ Fortunately for the Rangers the lead APC panicked and backed up into the APC behind it providing a large stationary target that was eventually destroyed by rockets. The third APC was also hit with a rocket and finally destroyed by an AC-130. There were no sources found to confirm or deny the presence of fixed-wing aircraft on the runway when the BTR-60s counterattacked but the inferred danger is obvious. A destroyed plane on the runway could have closed the airfield indefinitely and left the Ranger force without the possibility of rapid resupply or reinforcement.

Analysis

Because this operation was successful, it is not readily apparent where an armored vehicle capability would have enhanced the plan or reduced risk significantly. But it illustrates how this operation became harder to execute as lines of communication were stretched--just as we expect them to be in the future in order to truly have global power

projection. The availability of an armored package could add additional courses of action to this type of scenario and change what has become, in many cases, the predictable modus operandi of airborne forces.

In this particular operation, US firepower was overwhelming compared to that of the enemy's. Enemy air defense weapons were not sophisticated and had no radar tracking capability. They were not quickly mobile and therefore presented little threat to the AC-130 fire support platform, although they did hit eleven of thirteen troop transport aircraft. With regard to ground forces only a subjective assessment can be made. U.S. ground forces were only slightly outnumbered on the ground and equipped with virtually equal weapons as the enemy. Here leadership and training gives a significant boost in overall firepower. This assessment gives the Rangers a significant firepower edge over the PRA and Cubans combined, especially when the AC-130 package is added to the equation. Because neither force had any vehicle capability at H-Hour, maneuver of the two forces is a draw. While Rangers were better trained and led, the PRA and Cubans could offset that initially just through homefield advantage.

To make a review of this operation useful we must review in terms of the year 1999 and not 1983. Today the Ranger airfield seizure and forced entry capability is not markedly different than it was in 1983. But rogues around the world are becoming increasingly sophisticated. This leads to the first supposition in this analysis. Suppose the AC-130 could be separated from the forced entry package. This could legitimately be done very easily if enemy forces are equipped with shoulder fired antiaircraft weapons or other systems with electronic acquisition capability. To counter this enemy measure, we

have to employ other protective aircraft or guided weapons systems which can eliminate surprise of the assault force. Or we can fly the AC-130 high enough to protect itself. This often makes it ineffective for the supported ground forces. Additionally, as forced entry locations become farther from centers of U.S. military presence, the number of AC-130s and supported fuel tankers effectively puts more targets in the air. This analysis does not suggest that the AC-130 was not necessary in Grenada. Certainly it was and will remain useful for early entry force protection. But if an armored vehicle package could have been introduced to Point Salines early in the fighting, the AC-130 may have been able to depart. In 1983, it would not have made any difference but in an era when rogues can show up quickly with small, mobile anti-air weapons an armored vehicle capability could give the firepower advantage back to Rangers and reduces risk to aircraft.

The final supposition in this analysis is that if any enemy force were savvy enough to produce anti-air weapons at a target airfield and neutralize air cover for the ground force it could follow quickly with a small vehicle package of its own and destroy the ground force.

Another example of arrival of armored forces at an airfield is found in Operation Urgent Fury at Pont Salines Airfield. Well after the airfield was secure, three BTR-60s arrived. This happened after all Ranger C-130s had landed and off loaded cargo and after at least one C-141 had landed. Although these vehicles were destroyed they did make it to the runway. It is not wrong to assume that if those vehicle crews were better trained, had better timing or were just lucky they could have destroyed an aircraft on the runway

and either closed the runway down or caused a lot of Ranger casualties. The key fact here is that these vehicles showed up after the airfield was secure, during the hours of daylight when the AC-130 was most likely to be off station, and was able to penetrate the perimeter defense of the airfield.

Perhaps the Javelin missile would prevent this situation in this scenario from happening. While it could more than adequately assist in defense, it gives no offensive capability of maneuver to the ground force and in many cases the weight of it could hamper mobility and therefore maneuver. From a combat power standpoint the Grenadan forces had the capability to surpass the Rangers at maneuver and firepower-- and possibly protection. While the Rangers were clearly the better led force, an adequately trained Grenadan BTR-60 platoon would certainly have had a maneuver and firepower advantage until other assets (air or anti-tank) could be brought to bear. The point is simple--if the Rangers had an armored vehicle section or platoon of their own, they could have engaged the BTR'60s before they got within maximum effective range of the runway and the AC-130 would have been able to go off station and protect itself from modern day threats.

Operation Just Cause

The purpose of US invasion of the Republic of Panama on 20 December 1989, known as Operation Just Cause, was to overthrow the country's dictator, Manuel Noriega.

For nearly three decades, Manuel Noriega had been a known "wild card" in the ranks of the Panamanian army. Through the years of his military service, he had trained often with the U.S. military. As a senior ranking intelligence officer he often supplied

useful information to various U.S. agencies. While Noriega occasionally provided useful intelligence, he was also known, or at least suspected, to be involved in illegal activities and to be an unsavory professional soldier. Throughout the 1970's and 1980's Noriega used his military influence to support and therefore be supported by the country's often changing head of state. Through coercion, illegal rigging of elections and other various tactics he positioned himself to seize power as a military dictator on 16 December 1989.²⁹

Because the US had agreed to turn over the entire of the Panama Canal Zone in 1999, Panamanian forces were allowed to begin occupation of some US installations. In many cases Panamanian Defense Force (PDF) soldiers were living, working and training on US installations, sometimes just across the street from US troops and families. The proximity of PDF troops to Americans in some cases made tensions very high and provided a threatening environment of continuous random harassment.

On 18 December 1989, in light of recent events in Panama, President Bush authorized the invasion. This study will review and analyze only the initial forced entry operations conducted by the 75th Ranger Regiment. The Regiment conducted two simultaneous airfield seizure operations at 0100 hours on the morning of 20 December 1989. The first airfield seizure to be analyzed will be the seizure of the military air base at Rio Hato. The second will be the seizure of the military airfield at the Torrijos/Tocumen International Airport.

Situation at Rio Hato

Rio Hato was a Panamanian military base located approximately seventy-five miles west of Panama City on the Pacific Coast. The significance of this base was that it

had a 1.5 mile long runway, was the home for two Panamanian Defense Forces infantry companies, the PDF NCO Academy, a PDF ammunition storage facility and a facility called Farallon which was Noriega's beach house.³⁰ The PDF military base at Rio Hato was targeted mainly because it was a PDF base. It housed PDF troops and equipment and was expected to be well defended. Because the destruction of the PDF was one of the invasion operational objectives, U.S. forces targeted PDF forces. Planners determined that any strike on this base must be quick and overwhelming. Otherwise the PDF garrisoned at Rio Hato might have the opportunity to move to and reinforce other PDF forces or withdraw into the jungle and subsequently conduct guerilla warfare.³¹ The enemy force at Rio Hato had the potential to be formidable. At the high end of the estimate the PDF could have up to 440 infantry soldiers, 50 engineers and 250 cadets. The forces could be equipped with up to three V-300 and sixteen V-150 armored cars, and over twenty mortars, 10 recoilless rifles, 200 RPG-7 grenades, and three ZPU-4 air defense guns.³²

The Ranger assault force assigned to seize Rio Hato was comprised of 2nd Ranger and 3rd Ranger Battalion (minus C Company). This force was made up of 837 Rangers. It was augmented by one AC-130 Spectre gunship, two AH-64 Apache helicopters, and two AH-6 attack helicopters, and two F-117 stealth fighters.³³

Seizure of Rio Hato

The plan for the seizure of Rio Hato is very simple. At precisely 1:00 a.m. two F-117's stealth fighters each dropped one 2,000-pound bomb near the two PDF infantry company barracks. Immediately following the F-117s, the AC-130 and four attack

helicopters came on station and continued to prepare the objective for Rangers with ninety seconds of fire. They targeted troop formations, air defense positions, armored vehicles, and crew-served weapons. The purpose of the F-117's bombs was to surprise and stun the PDF. The purpose of the other aircraft fires was to enhance confusion and destroy armed threats.³⁴ This worked to some degree but not as planned. U.S. intelligence sources were alerted to the fact that operational security had been breached and that the PDF expected U.S. forces to arrive at 0100 hours. This information made it to the Rangers in the air at 2300 hours-two hours before H-Hour.³⁵

After preparatory fires on the airfield the 837-man Ranger force would conduct a parachute assault onto the Rio Hato airfield and secure the PDF barracks and the Pan-American Highway approaches to the airfield. The purpose for seizure of the PDF barracks was to secure PDF forces or destroy them if necessary to prevent their escape and subsequent withdrawal into the jungle. The Pan American Highway crossings were to be secured also to prevent PDF forces from escaping and prevent other PDF forces from reinforcing. Although Noriega was not expected to be at his beach house it was secured to facilitate overall perimeter security of the airfield.

The airborne assault and subsequent seizure occurred nearly exactly as planned. The loss of operational security and subsequent loss of surprise made the fighting on the airfield confused. The ZPU-4 air defense gun that fired on US aircraft was quickly put out of action by an AH-64. The heaviest firing at Rangers on the ground was from one .50 cal machine gun and small arms. Although the PDF were alerted prior to the assault the pre-H-Hour fires effectively disorganized the enemy. Only one PDF armored vehicle

was put into action and that was to escape from Rangers not to engage them. The airfield was secured within two hours. It cost the assault force four dead, eighteen combat wounded and twenty-six injured from parachute injuries.

Analysis of Rio Hato Seizure

Once again it is hard to recommend changes to a plan that worked very well. From a mere firepower standpoint the forced entry package clearly had a decisive overmatch if we compare just firepower systems of both sides without introducing any of the battlefield framework into the equation. The forced entry package outnumbered the maximum expected ground force by nearly two to one. PDF air defenses were machine-gun type without any sophisticated tracking systems and no missile capability. Obviously air assets had virtually no threat. The nineteen expected enemy armored vehicles had virtually no defense against AH-64 helicopters and an AC-130 gunship. On paper the firepower comparison is clearly overwhelming on the part of the Rangers.

Now if we add battlefield realities to the analysis of firepower in this scenario, the scale could tip back toward the PDF. For instance, the Ranger force did not have tactical surprise when it assaulted Rio Hato. Fortunately the PDF did not have the assets to use this to their advantage. Some attempted an uncoordinated fight while some ran. The real issue for this study is the PDF armored vehicles. A few variations to this scenario that could change the firepower equation are that the PDF could have withdrawn the vehicles in advance of the assault. This act may have preserved firepower until the air cover departed and provided a window for an armored counterattack on an unprotected dismounted force. In this case the firepower advantage would clearly have gone to the

PDF. The ninety-millimeter recoilless guns on three of the vehicles alone could possibly have produced more firepower than most of the Ranger force. The other elements of combat power have not yet been considered. In this scenario an armored force would clearly have the maneuver advantage, the ability to destroy the Ranger force by fire and movement. Even though dense jungle along roads in the vicinity hampered mounted maneuver, armored vehicles could trade small arms fire with blocking forces and because of their inherent protective capabilities would probably win this duel.

Certainly one could argue that today this scenario could be countered by the fact that Rangers are equipped with the Javelin missile system. This system is a fire and forget system with a near 100 percent hit rate. While it is true that this is a very capable system, it is bulky. It is hard to mass enough systems at the point of attack on the perimeter of an airfield.

Once again the protection argument remains the same as does the maneuver argument. Crewman in an armored vehicle are better protected than Rangers on the perimeter of an airfield they just seized. Armored vehicles can exploit the maneuver element of combat power over a Ranger force.

From a leadership perspective the Rangers were the better led force. The PDF at Rio Hato were virtually devoid of leadership. But the point here is that had any sizeable vehicular force escaped from Rio Hato the PRF could arguably have become the better led force. The reason is besides having the homefield advantage (i.e., better knowledge of your surroundings than the enemy) they could have had an advantage of three elements of combat power-maneuver, firepower and protection. It is not unreasonable to think

that if a small PDF force had (or perceived) an advantage over the Rangers in firepower, maneuver and protection that their leaders would have been more bold and daring through perceptions of invincibility.

There are two instructive points to the Rio Hato airborne assault. First, the U.S. held the firepower advantage due to the available air assets, even if the PDF manned all their vehicles. Ranger forces cannot expect to have an air cap for protection in all environments. If this is the case, it is the Ranger Achilles heel. It was much easier to have an air cap in Panama when you have US Air Force bases in the country you are invading, allies nearby, or your own country close by. Absence of any of these factors could negate legitimate air cover. Secondly, this was the second large-scale airborne assault by Rangers in less than a decade and it was expected without tactical surprise. While surprise is not an element of combat power, the absence of it can enhance the enemy's ability to generate combat power. Clearly a small armored package on Rio Hato would have significantly increased the combat power of the ground force and could have allowed the air cap to displace and cover other forces or just get out of harms way to stand by for assistance against the unexpected.

Situation at Torrijos/Tocumen

The Torrijos/Tocumen airport is actually two airports that nearly touched end to end. The northern airfield is the Tocumen military airfield and the southern is the Omar Torrijos International Airport. The significance of this airport as a target for the most part is obvious. Airports controlled by friendly forces are excellent for the quick influx of troops and equipment. Aside from the obvious, this airport complex was key for other

reasons. It lay just outside Panama City and was an expected escape route for Noriega. In addition to the strategic purpose of preventing a Noriega escape, there were a number of tactical reasons for seizing this airport complex. The Panamanian Air Force (FAP) was stationed there with as many as 150 personnel along with one infantry company of up to 200 soldiers. The airport also made an exceptional departure point for friendly forces against targets in Panama City. Seizure of the airport also prevented its use by the PDF as a staging base or stronghold for launching counterattacks into Panama City as it had done during a recent coup in support of Noriega. Finally, although the US Air Force occupied its own base also outside Panama City, Howard AFB was not considered secure or easily securable due to the jungle covered high ground that surrounds it. This was exceptional ground for PDF mortars and hard ground in which to conduct dismounted assaults on PDF.³⁶

Between FAP personnel and the PDF company at Tocumen Airport US planners expected as many as 380 enemy personnel. This was not considered significant if pre-assault fire caught these forces asleep in their barracks. A stunned or possibly destroyed force of this size would be no match for a 731-man Ranger force.³⁷ The real concern was the ability of the two hundred man elite battalion stationed at Fort Cimarron sixteen miles away. Not only was this unit close, it was equipped with nine V-300 light assault vehicles and at least twelve mortars. The V-300 is equipped with a 90mm cannon and could do considerable damage to a light infantry force. Additionally, this battalion was known to have failed Noriega in a coup earlier in the month and analysts suspected they would not fail again because their lives were in jeopardy if they did.³⁸

Seizure of Tocumen Airfield

In reviewing this operation I will not review the plan and then the execution because this mission went virtually according to plan.

The assault plan for the Tocumen Airfield was similar to that of Rio Hato. At exactly 0100 hours, the same as Rio Hato, preparatory fires would begin on key targets on the airfield. In this case fires could be provided by one AC-130 gunship and two AH-6 attack helicopters. Not nearly the fire power capability at Rio Hato but about equal when compared to the expected enemy force. The pre-assault force in this case destroyed the barracks of the local infantry company, the control tower, two guard posts and one ZPU-4 anti-aircraft gun in time for the Ranger Parachute assault at 0103 hours.

The Ranger force assaulting Tocumen Airfield was 732 Rangers strong (comprised of 1st battalion with one company from 3rd Battalion). It had four objectives: the Panamanian Air Force Headquarters, the barracks of the infantry company, the local PDF troop recreation center and cordon of the civilian passenger terminal on the international airport.³⁹ After these objectives were secured a security perimeter would be established around the Tocumen military airfield. All objectives had to be accomplished in forty five minutes for two reasons. The first reason was that 0145 hours was the earliest expected time of reinforcement by the PDF elite battalion, Battalion 2000, thus requiring the perimeter security to be emplaced. Secondly, 0145 hours is when the brigade from the 82nd Airborne Division was to parachute onto the tarmac of the adjacent Torrijos International Airport.

The assault of Tocumen airfield went nearly according to plan. The shortfalls that occurred were primarily due to the breakdown of operational security which alerted Panamanian forces before the assault. Because the PDF was alert at Tocumen, the highly destructive fires on the PDF barracks there did not significantly degrade that infantry company's ability to fight. That company was already out of the barracks when the fight started. Although most PDF and FAP forces decided to run or surrender those that stayed forced the Rangers to undergo the time consuming task of detailed building clearing. While the area was virtually secure, there were still minor firefights in progress when the 82nd Airborne Division began their jump. With friendly forces jumping in the middle of combat operations the potential for friendly fire casualties was great. Fortunately this did not happen.

Although Ranger operations were not completed within the first forty-five minutes after their assault began and there was confusion with follow-on forces, the mission did go virtually according to plan. The human cost of this operation was one Ranger killed, eight wounded and fifteen jump injuries. While casualties are never good, the Regimental Commander, Colonel Kernan, estimated in the worst case that two thirds of his force (nearly 500 rangers) could have become casualties if the PDF Battalion 2000 was able to reinforce the infantry company stationed at Tocumen.⁴⁰

To conclude the review of this mission two other facts, while unrelated to one another, must be reviewed and analyzed. The first is the approach of a not yet matured ranger roadblock by two cars. A number of roadblocks were to be established early during the assault to prevent escapes and reinforcements. While in the process of being

established one Ranger roadblock was approached by two vehicles from within the perimeter. The first was stopped but the second got away. It would later be discovered that the escaped car contained Noriega.⁴¹ The second detail necessary for this study is the mention of the M551 Sheridan tanks delivered by the 82nd Airborne Division onto the Torrijos Airport. Approximately a platoon of Sheridans was air dropped to provide fire support on subsequent objectives assigned to the 82nd Airborne and to assist in convoy protection. Of the tanks deployed by parachute (approximately 1 platoon) one was destroyed on impact and some (undetermined number) landed in swamps adjacent to the runways. The purpose of mentioning this detail will be clarified in the analysis when comparing the need for those additional elements of combat power a tank provides versus the ability of failed deployment to destroy the tanks, the runway and troops below.

The analysis of this airborne assault does not provide new reasons to support addition of an armored vehicle package to the Ranger Regiment but it does clearly reinforce some lessons already learned.

Again, when analyzed from a sterile standpoint the Ranger forced entry package had the combat power advantage. The Ranger force consisted of 731 soldiers against 200 PDF soldiers and 150 FAP airmen of unknown but suspected low quality in comparison. The Ranger assault force was supported by one AC-130 and two attack helicopters while the enemy had no credible air defenses or armored vehicles at the target location. In this vacuum the Rangers had the combat power advantage. They outnumbered the enemy more than two to one if all enemy troops stayed to fight. Again, we can assume the Rangers had a significant leadership advantage and clearly a firepower

advantage through small arms alone plus the advantage of aerial firepower assets. From a protection standpoint Rangers are vulnerable during descent but that disadvantage is negated upon landing.

Once we leave the vacuum of pure mathematical analysis there are factors that lead to an enemy advantage. First, tactical surprise was once again lost prior to the assault. In this case it allowed some enemy forces to flee, but it very well could have given the enemy time to prepare defenses. Secondly, the loss of tactical surprise could have caused the armored vehicle equipped battalion in Panama City to mobilize and attack the assault force while it was most vulnerable. Finally, the open nature of this airport as opposed to that of Rio Hato enhanced the lethality of armored forces. It gave armored forces stand off range, greater capability of maneuver and numerous avenues of approach. While none of these things did happen they were clearly considered by the Ranger Regimental Commander, as mentioned earlier. Even with the air cap, he believed his force could sustain up to two-thirds of the force combat ineffective if the PDF Battalion 2000 attacked with all its vehicles. If the 2,200 soldiers of Battalion 2000, the unit's nine vehicles (with 90-millimeter canon) and twelve mortars were injected into the defense of Tocumen Airfield or employed as a counterattack force, the firepower advantage could clearly be to the PDF. This force would also have a significant maneuver and protection advantage but the most significant advantage change could be in leadership. Leadership in this case being the psychological component. If Rangers began incurring significant casualties, manpower decrease and duration of the mission could degrade leader ability to be effective. On the other hand, success again might have

emboldened the PDF leaders. The clear antidote to this scenario is armored vehicles. The presence of them alone could prevent the enemy from showing up. But if they did, the maneuver, firepower and protection equation could be back to favor Rangers.

UNOSOM II

The nation of Somalia found itself in civil war starting with factional fighting in the north in May 1988. The Somali civil war finally led to anarchy when on 27 January 1991 the nation's leader Siad Barre fled. At the time, the United States and its coalition partners were otherwise engaged in Operation Desert Storm.⁴² The civil war in Somalia was unlike that which many Americans envision a civil war to be with two clearly defined sides fighting against each other. The Somali civil war was a conflict with numerous clans fighting over numerous issues. Clans occasionally switched alliances to other clans. This made an internally brokered peace difficult and an externally brokered peace harder. Subsequently, this hybrid between civil war and anarchy took its toll on the populace in the form of famine, disease and the deterioration of civil infrastructure.

By the summer of 1992, the capital city of Magadishu appeared to be under the control of Mohammed Farah Aideed. While sporadic fighting between clans still occurred, it appeared that Magadishu was under enough positive control that relief supplies could safely be flown into the capital city. After US special representatives confirmed the Somali's deplorable conditions the UN offered aid under certain conditions. One of the conditions was that its relief personnel were allowed to be armed. With this agreement between the UN and the reigning warlord, Mohammed Aideed, the

U.N. Secretary General authorized the relief effort on 12 August 1992. President Bush authorized US assistance two days later.⁴³

This mission was known as Provide Relief (also known as UNOSOM-United Nations Operations in Somalia) for the purposes of providing humanitarian relief. The operation was successful for less than six months due to constant theft of relief supplies by bandits or outright confiscation by bandits of warring factions and/or clans. In response to this, the U.S. authorized deployment of armed forces to protect the distribution of relief supplies. This new operation was dubbed Restore Hope (also known as UNITAF-United Task Force). It was to be a humanitarian assistance mission with limited military capability.⁴⁴ This increase in military capability also failed to stabilize the situation. An extreme effort had been made to provide humanitarian assistance and still more than one million people were on the verge of death due to starvation.⁴⁵ After five months with little change under the Restore Hope mission the UN began a peace enforcement mission named UNOSOM II. In addition to the normal humanitarian assistance it was trying to provide, this mission would bring in more armed troops to disarm the warring clans of Somalia.⁴⁶

Through the nearly ten months of involvement in Somalia, it became clearer each day that while the city of Mogadishu had a leader, he was not an ally of the relief effort. It soon became apparent that Mohammed Aideed had no interest in helping the people of Somalia. In fact, he was directing the armed clans in and around Mogadisau. He was responsible for the looting and confiscation of UN relief supplies and using them for his own purposes. In response to this revelation the United Nations determined that

Mohammed Aideed had to be removed from his position as the controlling warlord of Mogadishu. A \$25,000 bounty was placed on his head in June 1993 as the first step.⁴⁷ In addition to the bounty the United States supported a United Nations recommendation to capture Mohammed Aideed.

With the capture of Aideed now a top priority, the US deployed some of its very best forces to Mogadishu: members of the 3rd Ranger Battalion, Special Forces Operational Detachment-Delta, and the 160th Special Operations Aviation Regiment. After one failed attempt to capture Aideed, the US Special Operations forces in Magadishu (known as Task Force Ranger) got another chance on 3 October 1998.⁴⁸

The Aideed Capture Plan

In many respects there was no firm plan to capture Mohammed Aidid. Because his exact location was seldom known, the Ranger Task Force had to be ready to move at a moment's notice when his location was finally discovered. In this particular case, the events on 3 October 1993 began with a signal from an informant from a clan that rivaled Aidid's. In the early afternoon of 3 October 1993, a Navy P-3 Orion aircraft was following the route of an informant's car. The informant was following the cars of an undetermined number of Aidid's top lieutenants. This convoy moved into a part of Mogadishu known to be an Aidid stronghold. When the Aidid lieutenants stopped and entered a building, the informant would pull up in front of the building and give a signal to the virtually invisible aircraft overhead.⁴⁹ From here Task Force Ranger would execute a compressed planning sequence and attempt to capture Aidid.

The plan for this assault included six helicopters (2 x MH-60, 4 x MH-6) with Delta Force assaulters and four helicopters (4 x MH 60) to insert the Ranger isolation force around the target building.⁵⁰ The target building lay in a formerly modern part of Mogadisau replete with hotels and associated commercial type buildings. The roads originally were paved and the area at its zenith had the benefits of modern urban infrastructure. Near this former modern area (within 500 meters) were blocks upon blocks of shanties and buildings constructed from scraps. The plan called for Delta force personnel to "fast rope" to the ground secure the target building and kill or capture Aideed's lieutenants inside. As soon as the Delta Force helicopters flew away, the four Ranger helicopters would hover over the street at each corner of the target building. The Rangers on board would fast rope to the ground and prevent any Aideed allies from approaching and reinforcing those in the target building. Once the assault force had captured the designated personnel another Ranger Force in trucks pre positioned approximately one half mile away would come forward and pick up the assault and isolation forces with the "precious cargo" and deliver all back to the Mogadishu airport.⁵¹

Exfiltration from Aideed headquarters

3 October 1993

Almost as soon as the Delta Force assaulters finished "fast roping" from the infiltration aircraft it began taking fire. As helicopters took fire they returned fire as well.⁵² Within approximately ten minutes of inserting the ground force and after noticing a substantial increase in the use of rocket propelled grenade's (RPG's) in a surface to air mode, a US Blackhawk helicopter was shot down.⁵³ A lucky RPG shot destroyed the

rotor blades and the helicopter crashed hard about six hundred yards from the nearest Ranger isolation force.⁵⁴ Almost immediately four things began happening:

1. An MH-6 helicopter landed at the crash site and immediately received fire from armed mobs but managed to rescue two of the aircrew;
2. A combat search and rescue helicopter arrived and unloaded a security and medical team;
3. Armed Somali mobs around the original target building began moving quickly toward the crash site; and
4. One Ranger blocking team from the target building immediately grasped the gravity of the situation and ran to the crash site to secure it.⁵⁵

While the crash site was turning into a heavy battle, the exfiltration truck convoy was loading the captured Aideed lieutenants. It began taking heavy small arms and RPG fire. The remaining ground forces (Ranger and Delta) began opposed movement toward the crash site. Concurrent with all these actions, a reserve helicopter moved in to fill the fire support gap opened by the downed helicopter. Almost immediately after it arrived on station, a Somali RPG hit it in the tail rotor and it crashed.⁵⁶ This crash site was about one mile south of the original target.⁵⁷ This was the opposite direction from the first crash site.

All forces in the vicinity became rescue forces. All ground forces and the truck convoy headed toward the first crash site when the second crash occurred. The dismounted forces made it to the first crash site but the truck convoy had taken so many casualties it was forced to withdraw.⁵⁸

In response to crash site two, only two Delta snipers on another Blackhawk were available for assistance. Armed crowds immediately formed around this crash site also. All four personnel on the aircraft survived the crash. But as soon as the mobs arrived, three passengers and the two rescuers were killed. The surviving pilot was taken prisoner.⁵⁹

Back at crash site one, all ground forces made it to the vicinity of the crash site but intense small arms fire prevented American forces from building a coordinated defense. Subsequently, little pockets of Rangers and Delta took cover in the area and fought into the night. A plan was developed to rescue the rescuers at crash site one and a HMMWV-equipped company from the 10th Mountain Division (The QRF-Quick Reaction Force) was ordered to the scene. It was quickly ambushed and forced to turn back.⁶⁰

It was apparent at this point that lightly armed truck convoys could not negotiate the roads to crash site one. Enemy fire was intense, maps of the area were poor due to the depressed shantytown sprawl of the area and the trucks to be used offered very little protection or firepower. With each passing moment the Somali's were also able to move debris into the roads to form roadblocks that trucks could not penetrate.

After the remnants of the 10th Mountain Division QRF withdrew to the Mogadishu Airport, it was reinforced by the addition of another 10th Mountain Division rifle company, a Ranger platoon, two companies of Malaysian mechanized infantry (32 APC's total), a platoon of Pakistani tanks (4x US M-48 tanks) and nine Cobra gunship helicopters.⁶¹

During the movement to crash site one, one of two APCs leading the convoy was destroyed by RPG's. A number of American passengers were wounded. The platoon caught in the ambush was rescued by another APC equipped force. Additionally, and against the orders of the rescue force commander, the Malaysian drivers retreated. This put its American counterparts and passengers out of the fight.

The remaining Malaysian APCs ferrying the one remaining 10th Mountain Company made it to crash site one and relieved the force there. All wounded were put on the vehicles and those not wounded ran alongside the vehicles until out of the immediate combat zone and back to friendly lines.⁶²

Analysis of October 1993 Somalia Raid

Analysis of this vignette yields many supporting themes to this thesis, yet it differs from previously reviewed Ranger missions. The real essence of this analysis revolves around the urban environment of Mogadishu. While there is very little argument that armored vehicles could have been reasonably used in the air assault raid on Aidid's headquarters, their utility as a contingency asset also becomes obvious.

From the standpoint of the elements of combat power, it is more difficult to analyze the capabilities of belligerents in an urban scenario. In some cases maneuver can be restricted by seizing one street but enhanced by seizing another a block away. As with firepower, a well-equipped force could have no firepower effect on an adversary because of the protection afforded by structures. But, on the other hand, a well-placed sniper can have devastating effects on an enemy force. The one element of combat power that seems most constant in an urban area is leadership. A leader's influence is degraded in an

urban environment (by communications) whereas the enemy's may be enhanced if he is a native as in this vignette.

The first element of combat power I will analyze in this vignette is firepower.

When comparing the Somali mobs to the American forces involved from just a firepower standpoint the Americans had greater firepower capability. Between Task Force Ranger and the 10th Mountain Divisions QRF there were over fifteen armed attack helicopters and nearly three hundred American ground troops. But firepower did not win the day. In this case it was subordinated to protection and maneuver. Due to the nature of the event (in this case a rescue operation) Task Force Ranger essentially took away its own ability to maneuver by rushing to crash site one. Because protection was not optimal and the area was unfamiliar an armed mob was able to pin down nearly the entire force. This certainly is not an indictment on Task Force Ranger. The simple fact is that the addition of the third dimension in urban terrain increases the difficulty of maximizing combat power much more so than on a more traditional battlefield.

The next element of combat power--leadership, may be analyzed as a Task Force Ranger weakness in some regards. There were some leadership principles that our best American soldiers could not execute optimally in urban terrain. Leaders are spread out from subordinates and superiors. Hence, information is not easily distributed to maximize available assets, for example: coordinating fire support, maneuvering troops, adjacent unit coordination, etc. These same things may not happen to the enemy. An untrained but native force may be very experienced at fighting without leaders and is able to execute an exceptional war of attrition. In the case of the Somalis this was true.

Additionally, culture and Rules of Engagement (ROE) placed additional burdens on American leaders but not on Somalis. Culturally, American soldiers will not leave wounded or dead while Somalis will. This is a huge burden on the American force while not a burden to the opposition. Somali women and children were pointing out American positions to their gunmen or were used as shields. Certainly this was an obstacle for American leaders. The point is that in situations like these, simple things can make leadership extremely difficult.

The saving grace of this operation was an armored vehicle package. In this case armored vehicles were the only things that were able to put all four elements of combat power together better than the enemy.

¹A National Security Strategy for a New Century, Washington DC: The White House, October 1998, 1.

²National Military Strategy of the United States of America, Washington DC: Department of Defense, 1997, 9.

³A National Security Strategy for a New Century, Washington DC: The White House, October 1998, 26.

⁴Ibid., 23.

⁵Ibid., 27.

⁶National Military Strategy of the United States of America, Washington DC: Department of Defense, 1997, 3-4.

⁷Ibid., 25.

⁸Field Manual 100-25, Doctrine for Army Special Operations Forces, Washington DC: HQ Department of the Army, December, 1991, 8-1.

⁹Field Manual 7-85, Ranger Unit Operations, Washington DC: HQ Department of the Army, June, 1987, F-10.

¹⁰Paul B. Ryan, *The Iranian Rescue Mission: Why it Failed*, (Annapolis, MD: Naval Institute Press, 1985), 6.

¹¹Ibid., 6.

¹²Charlie A. Beckwith and Donald Knox, *Delta Force*, (New York: Harcourt, Brace, Jovanovich, 1983), 268.

¹³William C. Gilmore, *The Grenada Intervention: Analysis and Documentation*, (New York: Facts on File Publications, 1984), 12.

¹⁴Hugh O'Shaughnessy, *Grenada: Revolution, Invasion and Aftermath*, (London: Sphere Books Limited, 1984), 1.

¹⁵Ibid., 2.

¹⁶Joint History Office, *Operation Urgent Fury*, (Washington DC: HQ Department of the Army, 1997), 1.

¹⁷Ibid., 10-11.

¹⁸Ibid., 1.

¹⁹Ibid., 9-10.

²⁰Ibid., 11.

²¹Ibid., 27-32.

²²Hugh O'Shaughnessy, *Grenada: Revolution, Invasion and Aftermath*, (London: Sphere Books Limited, 1984), 88.

²³Mark Adkin, *Urgent Fury: The Battle for Grenada*, (Massachusetts: Lexington Books, 1989), 197-198.

²⁴Ibid., 195-196.

²⁵Ibid., 203.

²⁶Ibid., 194-212.

²⁷Ibid., 224-225.

²⁸Ibid., 225.

²⁹Caleb Baker, Thomas Donnelly, and Margaret Roth, *Operation Just Cause: The Storming of Panama*, (New York: Macmillan, Inc., 1991), Forward.

³⁰Ibid., 336-338.

³¹Joint History Office, *Operation Just Cause*, (Washington DC: HQ Department of the Army, 1995), 6-7.

³²Caleb Baker, Thomas Donnelly, and Margaret Roth, *Operation Just Cause: The Storming of Panama*, (New York: Macmillan, Inc., 1991), 336-338.

³³Ibid., 339.

³⁴Ibid., 340-341.

³⁵Ibid., 334.

³⁶Ibid., 190.

³⁷Ibid., 189.

³⁸Ibid., 191.

³⁹Edward Flanagan, *Battle for Panama: Inside Operation Just Cause*, (Washington DC: Brassey's (US) Inc., 1993), 157-158.

⁴⁰Caleb Baker, Thomas Donnelly, and Margaret Roth, *Operation Just Cause: The Storming of Panama*, (New York: Macmillan, Inc., 1991), 191.

⁴¹Ibid., 192.

⁴²Terrence Lyons and Ahmed Samataar, *Somalia: State Collapse, Multilateral Intervention and Strategies for Political Reconstruction*, (Washington DC: The Brookings Institution, 1995), 5-9.

⁴³Walter S. Clark, *Somalia: Background Information on Operation Restore Hope, 1992-1993*, (Carlisle Barracks: US Army War College, 1992), 36-37.

⁴⁴Kenneth Allard, *Somalia Operations: Lessons Learned*, (Washington DC: National Defense Press, 1995), 14-16.

⁴⁵Ibid., 13.

⁴⁶Ibid., 18.

⁴⁷Kent DeLong and Steven Tuckey, *Mogadishu! Heroism and Tragedy*, (Westport: Praeger, 1994), xviii.

⁴⁸Ibid., 3.

⁴⁹Ibid., 2-3.

⁵⁰Ibid., 4.

⁵¹Ibid., 4-5, 21-22.

⁵²Ibid., 14-15.

⁵³Ibid., xi, 15.

⁵⁴Ibid., 15-16.

⁵⁵Ibid., 16-23.

⁵⁶Ibid., 40-41.

⁵⁷Ibid., 54.

⁵⁸Ibid., 30.

⁵⁹Ibid., 53-59.

⁶⁰Ibid., 46-49.

⁶¹Ibid., 62-63, 71.

⁶²Ibid., 90-97.

CHAPTER V

CONCLUSION

As an infantryman my assignment history includes four years as a mechanized infantryman in the 2nd Armored Division. This assignment included nearly two years as a Bradley fighting vehicle (BFV) platoon leader and later as a BFV company executive officer and finally as the battalion scout platoon leader. I fought with my brigade in Operation Desert Storm in the coalition invasion of Kuwait City while attached to the 2nd Marine Division. As a Captain, I was assigned to the 7th Infantry Division (Light) and eventually commanded a light infantry rifle company for nearly two years. My final assignment before this project was a three-year assignment to the 2nd battalion 75th Ranger Regiment, where I earned the privilege of commanding a rifle company for sixteen months.

The point of reciting my military experience is to say that at one point I believed myself to be well grounded in employment of tactical infantry formations and that not much remained to be learned. I assumed that every unit I would be assigned to was properly equipped and that victory by engaged U.S. forces was a foregone conclusion.

Study of the four previous historical examples illuminated a few common themes that appear to be missing in planning future operations with regard to posture and capabilities of enemy forces and shortcomings of friendly forces. My conclusion is that in some very possible scenarios, our lightest, most trained and deployable units cannot generate enough combat power to do what is expected of them.

Conclusions on Firepower

The most apparent theme in the four examples studied is the presence or expected presence of enemy armored vehicles. It is clear they were present in Grenada and Panama. The ground force commander for Operation Eagle Claw clearly thought armored vehicle presence was likely during the hostage rescue. Although no enemy armored vehicles were used against Rangers in Somalia there is clear video evidence that some armed factions had operable tanks and armored personnel carriers as well as machine gun armed trucks.

Another common theme is apparent when Ranger firepower producing equipment is compared to that of enemy forces in the four examples. Rangers in all scenarios studied have not over-matched their opponent by virtue of deployed weapon systems with the ground force. In every case each side had comparable small arms. Each had rifles, machine guns, and rocket launchers and most had mortars. Clearly there was no weapon system with the Ranger force that ensured overwhelming combat power after reaching their target. Mass, while not an element of combat power, may have produced overwhelming firepower but only in two cases (Grenada and Panama). Clearly, the mass that would have facilitated a firepower advantage was not a luxury in the planning of Operation Eagle Claw or in Somalia.

Since 1979 the only system that has been fielded which has no comparable enemy equivalent and is employed by Rangers is the Javelin Anti-tank Missile System. While it is virtually infallible from an engagement perspective it is hard to move quickly and employ. This system gives no advantage against the dismounted threat and at best only evens the playing field against enemy armor. This is especially true depending on the

nature of the airfield to be secured. Javelins may give adequate force protection to a seized airfield in heavily urbanized terrain but the more open an airfield is (i.e., one out in the desert) the more the advantage turns toward the enemy's armored vehicles because of their maneuver advantage.

The Javelin has no offensive qualities when compared against the current Regimental Commander's vision of Ranger employment, which includes possible movement into urban terrain for follow-on operations after an airfield seizure. My conclusion on firepower is that the Ranger forced entry package does not have enough organic systems to generate overwhelming firepower with the equipment currently assigned. Currently, the only elements that enhance Ranger firepower after an airborne assault are airpower and surprise.

The analysis of the principle of surprise as an enhancer of the elements of combat power is short. There is clear evidence that the Ranger force that assaulted Grenada and Panama did not have operational surprise. Furthermore, there is evidence that the 1993 Ranger raid in Somalia did not have surprise. It is very easy to speculate that surprise was compromised during Operation Eagle Claw by virtue of the escaped pickup truck. Additionally, passing the same two roadblocks three times each in the same trucks on the same day clearly could have compromised the Iran hostage rescue mission. While this is only speculation it is a reasonable assumption. When the four scenarios are analyzed, one discovers that more often than not the Ranger force assaults without surprise. A savvy enemy could have easily used the lack of surprise to enhance certain elements of their combat power and decrease that of the Rangers.

The final common theme with regard to firepower is the analysis of the utility of the AC-130 gunship and helicopters. My first comments address the AC-130 gunship. It is clearly a significant firepower asset and often gives the Ranger force a decisive firepower advantage. It is also evident that three of the four airfield seizures studied (one in Iran, one in Granada, and two in Panama) had an enemy air defense component. Except for the one airstrip in the middle of the Iranian desert the others all had air defense systems overwatching the airfields. These three airfields were also near urban areas that had a military force stationed in local towns or at the airfield itself. The significant detail here is the air defenses. They were all equipped with old, rudimentary systems without tracking capability and were destroyed quickly although eleven of thirteen aircraft were hit going into Point Salines, Granada.

My assessment of enemy air defenses is that a determined enemy could easily improve on the poor placement of air defense systems in the examples studied and pose a much greater threat to the AC-130. Some simple techniques would be to place the air defense systems outside the lodgment area of the assaulting Rangers. This protects them from dismounted assault and forces the AC-130 to destroy them before supporting the Rangers. Additionally, the use of many systems to draw the attention of the AC-130 aircraft and to employ air defense systems in depth. This could result in widening the AC-130 orbit to the extent that its systems become ineffective in supplying fire support. Another technique is for the enemy to increase the altitude at which the aircraft has to operate which will have the same effect. The final item to analyze regarding the AC-130 and enemy air defenses is the proliferation of shoulder fired anti-aircraft weapons. It is

easy to envision an enemy equipped with these systems and it is even easier to imagine they could not be neutralized early or quickly by air or ground forces.

The final topic regarding aerial firepower covers helicopters. They significantly enhance the firepower of the ground force but they are vulnerable. First, their firepower capabilities are exceptional but their range and the amount of time they are available make their use questionable. Additionally, since the AH-64 and OH-6 (both used in Panama, the OH-6 in Grenada and the OH-6 in Somalia) are not air refuelable. Their utility is diminished if operations occur outside their flight radius. While the MH-60 is refuelable in flight and can carry anti-tank missiles it is clearly not an anti-armor weapons system platform. As seen in Somalia helicopters can be an easy target when flying low over urban areas. Thus helicopter support for Ranger forced entry operations is exceptionally effective under the proper conditions but it is not perfect and cannot go everywhere the Ranger force can go.

Conclusions on Leadership

The final common theme is battlefield psychology with regard to the element of combat power of leadership. In each of these examples the Ranger force had time to train specifically for its assigned mission. While this is the preferred way to train, Rangers are also expected to perform missions worldwide without preparation. Immediate deployment to combat without prior notification allows the enemy to maintain his homefield advantage. The enemy knows his terrain and surroundings while the Rangers have only the length of the plane ride to study their current situation. Add to this the length of time a Ranger is awake before he conducts his mission coupled with the unfamiliar

surroundings he faces when he arrives at his target. Elements such as these serve to enhance the enemy's leadership potential and decrease the Rangers. My final addition to this equation is that the longer a Ranger force stays on the ground the greater the advantage becomes the enemy's; especially after daylight when the Ranger night vision capability is negated. All events tip the scale to the enemy and diminish Ranger capability.

Conclusions on Protection and Maneuver

The final argument for addition of armored vehicles to the Ranger Regiment is proven by analysis of Ranger operations in Somali in 1993. This one scenario has an argument supported by all four elements of combat power.

In conjunction with the current commander's vision of employment of the Regiment it is clear that he expects an urban operation components. There is no question that armored vehicles would give a decisive advantage to Rangers in urban terrain. From a firepower analysis of Somalia it is clear that the Ranger force was counting on surprise to enhance its firepower and decrease that capability of the enemy. It is also clear that after the limited advantage that surprise gives had been negated the Ranger force never achieved fire superiority. Rangers were armed with small arms just as the Somali's and had no particular advantage in this area.

Additionally protection and maneuver favored the Somalis. They used the protection of urban terrain to negate the effects of helicopter mounted small arms. They also had a maneuver advantage through familiarity of the terrain. Somali belligerents were difficult to discern from bystanders and were able to move with impunity. The

anglers on the other hand were constrained by an objective; the rescue of downed comrades.

The Somalis had a clear advantage in protection and maneuver. While firepower was probably a draw the advantage of protection and maneuver increased the effectiveness of the fire power element to a Somali advantage. Leadership was always a Ranger advantage. It is what enabled them to survive but I don't believe you can be ultimately successful in a mission if your opponent has an advantage in three of the four elements of combat power.

As I indicated in the analysis the only asset to give the Rangers the combat power advantage in the urban terrain of Somalia was armored vehicles.

Final Conclusion and Recommendation

I will conclude with comparing the Army's Ranger Regiment to the U.S. stock market. Past performance is no guarantee of future success. The Ranger Regiment has not significantly changed its organization or capabilities since its inception over twenty years ago but America's enemies have. In order to generate the overwhelming combat power needed for success on the unknown, unplanned and surprise battlefields we expect Rangers to fight on in the future they need a system to the ground force that will generate overwhelming combat power. This system should provide at least four things; overwhelming firepower against enemy weapons; a rapid maneuver capability to the ground force commander; a sensor package that can leverage information to enhance leadership through faster and more accurate decision making capabilities than the enemy;

and protection for the crew. One type a system that can provide these elements of combat power to the ground force is an armored vehicle.

An armored vehicle system, whether a fighting vehicle or a tank could provide the necessary combat power this study recognizes as a Ranger shortcoming. In a constraint free environment a vehicle package consisting of both types of vehicles might be optimal. My recommendation is that armored vehicles accompany Rangers during forced entry operations. These vehicles should accompany the Ranger force and should not be employed as a follow on force. The introduction of armored vehicles nearly simultaneous with Rangers during forced entry would significantly increase the firepower capability of the Ranger force, provide a greater maneuver capability, increase the timeliness and accuracy of critical information to leaders and protect the force. Mission success is also enhanced by giving planners one more capability to work with and the enemy one more capability to worry about.

Armored vehicles will fill the combat power generation shortfall of current Ranger capabilities during forced entry. Their addition to the Ranger Regiment should be strongly considered.

CHAPTER VI

TOPICS FOR FUTURE STUDY

While my conclusion is that the Ranger Regiment needs armored vehicles as part of its forced entry package I did not study the type of vehicle requirements that might be needed.

The following questions are still in need of research:

1. Do the Rangers need a tank, armored fighting vehicle, armored personal carrier or a combination of vehicle types?
2. What vehicle qualities and capabilities are required? For example weapons requirements, degree of protection (RPG protective), wheeled or tracked, air dropable, MC-130 capable, helicopter transportable, censor and communication package, fuel type (single or multifuel) etc.?
3. Is there a requirement for this vehicle to destroy enemy armored vehicles and to what degree?
4. What is the best organization for these vehicles and what headquarters do they fall under (Ranger battalions, Ranger Regiment, USASOC, USSOCOM, etc.)?
5. Can a concept for employment be developed that meets tactical requirements and is logistically supportable?
6. Can a system be bought off-the-shelf or must a new one be developed?
7. What other uses is there for these vehicles other than the ones suggested in this study?

8. What type of training support assets would be required to maintain readiness of the vehicle crews?

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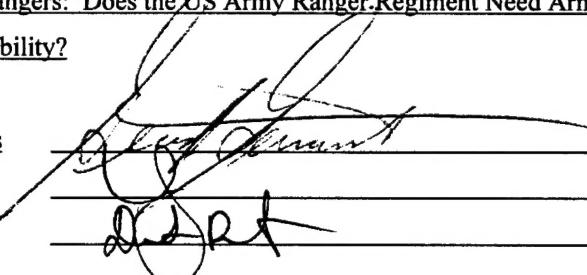
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